

CITY OF NEWTON
PURCHASING DEPARTMENT

CONTRACT FOR PUBLIC WORKS DEPARTMENT
(M.G.L. Ch. 30, Sec. 39M)

PROJECT MANUAL:
SUPPLY, DELIVER & PLACE
BITUMINOUS CONCRETE OVERLAY OF REINFORCED PANELS
ON LOWELL AVENUE AND CENTRE STREET
INVITATION FOR BID #15-73

Bid Opening Date: March 19, 2015 at 11:00 a.m.

MARCH 2015
Setti D. Warren, Mayor

CITY OF NEWTON, MASSACHUSETTS

PURCHASING DEPARTMENT

INVITATION FOR BID #15-73

The City of Newton invites sealed bids in accordance with M.G.L. c.30, §39M from Contractors for:

**SUPPLY, DELIVER & PLACE
BITUMINOUS CONCRETE OVERLAY OF REINFORCED CONCRETE PANELS
ON LOWELL AVENUE AND CENTRE STREET
(See Accompanying Plans)**

Bids will be received until: 11:00 a.m., Thursday, March 19, 2015

at the Purchasing Department, Room 201, Newton City Hall, 1000 Commonwealth Avenue, Newton, MA 02459. Bids will not be accepted nor may submitted bids be corrected, modified or withdrawn after the deadline for bids. Immediately following the deadline for bids, all bids received within the time specified will be publicly opened and read aloud.

The work of this contract consists of but is not limited to: Rehabilitation of an existing reinforced concrete roadway followed by the final overlay of the entire project area with bituminous concrete upon completion of all specified remedial measures.

*** Notice #1: The quantities represented in this Invitation For Bid are dependent on Massachusetts Department of Transportation (MassDOT) Chapter 90 funding. These monies are traditionally allotted, and subsequently apportioned by the City of Newton, on or about April 1 of each calendar year. Therefore the quantities listed in this Invitation For Bid may be revised at the time of the bid award.**

Contract Documents will be available online at www.newtonma.gov/bids or pick up at the Purchasing Department after **10:00 a.m., March 5, 2015**. Bids must be submitted with one Original and one Copy.

THE CITY WILL ACCEPT BIDS FROM MassDOT PREQUALIFIED CONSTRUCTION CONTRACTORS ONLY. MassDOT will provide a list of Prequalified Construction Contractors to the City of Newton. Bidders' qualifications will be verified at time of Bid Opening.

A bid deposit in an amount that is not less than five percent (5%) of the value of the bid, including all add alternates, is required. Bid deposits, payable to the City of Newton, shall be either in the form of a bid bond, or cash, or a certified check on, or a treasurer's or cashier's check issued by, a responsible bank or trust company. Bidders are reminded that the bid deposit covers the City for damages when a bidder withdraws its bid after the bid submission date. **Be advised that to the extent permitted by the law the City will retain all bid deposits for withdrawn bids.**

The City of Newton will award the contract to the lowest eligible and responsible bidder. Please Note: this bid, in accordance with the Chapter 303 Acts of 2008, contains Price Adjustments and new Prevailing Wage requirements. All bidders are required to familiarize themselves with these terms and conditions before submitting a bid.

Anticipated start date is June 25th, 2015. Time for completion is sixty (60) calendar days from the Notice To Proceed.

All bids are subject to the provisions of M.G.L. c. 30, §39M. **Wages are subject** to minimum wage rates determined by the Massachusetts Department of Labor and Industries pursuant to M.G.L. c.149, §26 to 27H. The schedule of wage rates applicable to this contract is included in the bidding documents. In addition, the prevailing wage schedule will be updated annually for all public construction projects lasting longer than one (1) year. You will be required to pay the rates set out in any updated prevailing wage schedule. Increases in prevailing wage schedules will not be the basis for change order requests. The successful bidder will be required to provide a Certificate of Insurance demonstrating current coverage of the type and amounts set forth in the Project Manual. The successful bidder will be required to furnish a **Labor and Materials Payment Bond in the amount of 50%** of the contract total. Wages are paid to drivers for all “on-site” work.

The costs of any bond and any insurance required in this Invitation For Bid are the responsibility of the bidder; such costs will not be reimbursed by City and should be included in your bid.

Once you've downloaded this bid from the internet website (www.newtonma.gov/bids) I strongly suggest you email (purchasing@newtonma.gov) your company's Name, address, EMAIL, phone, fax AND the INVITATION FOR BID NUMBER and Project Title, so that we may add you to the Bidders List and you will be notified of any/all addendums.

The City will reject any and all bids in accordance with the above referenced General Laws. In addition, the City reserves the right to waive minor informalities in any or all bids, or to reject any or all bids (in whole or in part) if it be in the public interest to do so.

CITY OF NEWTON

A handwritten signature in black ink, appearing to read "Nicholas Read". The signature is fluid and cursive, with the first name "Nicholas" written in a larger, more prominent script than the last name "Read".

Nicholas Read
Chief Procurement Officer
March 5, 2015

CITY OF NEWTON
DEPARTMENT OF PURCHASING
INSTRUCTIONS TO BIDDERS

ARTICLE 1 - BIDDER'S REPRESENTATION

- 1.1 Each General Bidder (hereinafter called the "Bidder") by making a bid (hereinafter called "bid") represents that:
1. The Bidder has read and understands the Bidding Documents, Contract Forms, General Conditions, Conditions of the Contract, General Requirements and Project Specification (collectively, referred to as the "Contract Documents") and the bid is made in accordance therewith.
 2. The Bidder has visited the work site and is familiar with the local conditions under which the work has to be performed.
- 1.2 Failure to so examine the Contract Documents and work site will not relieve any Bidder from any obligation under the bid as submitted.

ARTICLE 2 - REQUEST FOR INTERPRETATION

- 2.1 Bidders shall promptly notify the City of any ambiguity, inconsistency, or error which they may discover upon examination of the Contract Documents, the site, and local conditions.
- 2.2 Bidders requiring clarification or interpretation of the Contract Documents shall make a written request to the *Chief Procurement Officer*, at purchasing@newtonma.gov or via facsimile (617) 796-1227. The City will answer such requests if received by **Friday, March 13, 2015** at 12:00 noon.
- 2.3 Interpretation, correction, or change in the Contract Documents will be made by Addendum which will become part of the Contract Documents. The City will not be held accountable for any oral instruction.
- 2.4 Addenda will be emailed to every individual or firm on record as having taken a set of Contract Documents.
- 2.5 Copies of addenda will be made available for inspection at the location listed in the Invitation for Bids where Contract Documents are on file, in addition to being available online at www.newtonma.gov/bids.
- 2.6 Bidders or proposers contacting ANY CITY EMPLOYEE regarding an Invitation for Bid (IFB) or a Request for Proposal (RFP), outside of the Purchasing Department, once an IFB or RFP has been released, may be disqualified from the bidding process.
- 2.7 Bidders downloading information off the internet web site are solely responsible for obtaining any addenda prior to the bid opening. If the bidder makes themselves known to the Purchasing Department, at purchasing@newtonma.gov or via facsimile (617) 796-1227, they shall be placed on the bidder's list. Bidders must provide the Purchasing Department with their company's name, street address, city, state, zip, phone, fax, email address and **INVITATION FOR BID #15-73**.

ARTICLE 3 - MBE PARTICIPATION

- 3.1 Notice is hereby given that the Mayor's Affirmative Action Plan for the City of Newton in effect at the time of this solicitation is applicable to all construction contracts in excess of \$10,000.00.
- 3.2 Notice is hereby given that the City of Newton Minority/Women Business Enterprise Plan and the Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program in effect at the time of this solicitation are applicable to all City contracts for goods and services in excess of \$50,000.00.
- 3.3 Copies of the Plans and Program referred to in Sections 3.1 and 3.2 are available at: www.newtonma.gov/purchasing.

ARTICLE 4 - PREPARATION AND SUBMISSION OF BIDS

- 4.1 Bids shall be submitted on the "Bid Form" as appropriate, furnished by the City.
- 4.2 All entries on the Bid Form shall be made by typewriter or in ink.
- 4.3 Where so indicated on the Bid Form, sums shall be expressed in both words and figures. Where there is a discrepancy between the bid sum expressed in words and the bid sum expressed in figures, the words shall control.
- 4.4 Bid Deposits shall be submitted in the amount specified in the Invitation for Bids. They shall be made payable to the City and shall be either in the form of cash, certified check, treasurer's or cashier's check issued by a responsible bank or trust company, or a bid bond issued by a surety licensed to do business in the Commonwealth of Massachusetts; and shall be conditioned upon the faithful performance by the principal of the agreements contained in the bid. Bidders are reminded that the bid deposit covers the City for damages when a bidder withdraws its bid after the bid submission date. **Bid advised that to the extent permitted by law the City will retain all bid deposits for withdrawn bids.**

Bid deposits of the three (3) lowest responsible and eligible Bidders shall be retained until the execution and delivery of the City/Contractor agreement.

- 4.5 The Bid, including the bid deposit shall be enclosed in a sealed envelope with the following plainly marked on the outside:

- * GENERAL BID FOR: **#15-73**
- * NAME OF PROJECT: **Supply, Deliver & Place Bituminous Concrete Overlay of Reinforced Concrete Panels on Lowell Avenue and Centre Street**
- * BIDDER'S NAME, BUSINESS ADDRESS, AND PHONE NUMBER

- 4.6 Date and time for receipt of bids is set forth in the Invitation for Bids.
- 4.7 Timely delivery of a bid at the location designated shall be the full responsibility of the Bidder. In the event that Newton City Hall is closed on the date or at the time that bids are due, the date and time for receipt of bids shall be on the next business day following that the Newton City Hall and the Purchasing Department are open.
- 4.8 Bids shall be submitted with one original and one copy. Be advised that a new Massachusetts law has been enacted that required all employees who work on Massachusetts public works construction sites must have no less than 10 hours of OSHA-approved safety and health training. See Chapter 306 of the Acts of 2004, which will become effective July 1, 2006.
1. This requirement will apply to any general bid or sub bid submitted on or after July 1, 2006 and to any contract awarded on or after July 1, 2006.
 2. This law directs the Massachusetts Attorney General to restrain the award of construction contracts to any contractor who is in violation to this requirement and to restrain the performance of these contracts by non-complying contractors.
 3. The contractor and all subcontractors on this project will be required to provide certification of compliance with this requirement. Non-compliance with this new Massachusetts Law will disqualify you from bidding on public contracts.

4.9 PRICE ADJUSTMENT CLAUSES CHAPTER 90 FUNDS

It is the intention of the City to include differential price adjustments in the award of this Contract. These price adjustments shall be for 1) Fuel, 2) Liquid Asphalt and/or for 3) Portland Cement when such commodities have been determined to be integral components of the work.

For those commodities designated to be paid as a 'differential' items then the special provision shall provide for a price adjustment formula for the affected items. This adjustment shall be based on the difference between the **Base Price** and the **Period Price** which shall be evaluated on a **monthly** basis, but price adjustments shall only be made if the monthly cost change exceeds **+/- 5 per cent of the then current price**. Subsequently each respective price adjustment shall be made as specified under each applicable and separate payment item.

IMPORTANT NOTE: Depending on the prevailing market trends at the time of payment these price adjustments may provide for additional compensation to the Contractor, or they may otherwise result in a repayment to the City. The increase or a decrease in the value of the

commodity, during the applicable payment period in which the goods and/or services were rendered, shall be the determinant factor.

The City will refer to the Massachusetts Highway Department price adjustment tables as included in this bid package to establish the base price and will be used for the actual period price.

Price Adjustment Clauses – to apply as follows:

- **Diesel and Gasoline** – The Base Price, and the Period Price of fuel, shall be the derived average cost of Diesel Fuel and Gasoline Fuel combined for each applicable payment period. Fuel adjustments shall apply to all work in the contract. The Contractor, at its own election, may either choose to bid fuel costs separately, or he may otherwise elect to incorporate fuel costs into separate payment items. In any event the Contractor's final bid prices shall include the fuel costs for all goods & services rendered under this contract.

No price adjustment will be allowed beyond the completion date of the contract unless there is an approved extension of time by the City.

ARTICLE 5 - ALTERNATES

- 5.1 Each Bidder shall acknowledge Alternates (if any) in Section C on the Bid Form.
- 5.2 In the event an Alternate does not involve a change in the amount of the base bid, the Bidder shall so indicated by writing "No Change", or "N/C" or "0" in the space provided for that Alternate.
- 5.3 Bidders shall enter on the Bid Form a single amount for each Alternate which shall consist of the amount for work performed by the Contractor.
- 5.4 The low Bidder will be determined on the basis of the sum of the base bid and the accepted alternates.

ARTICLE 6 - WITHDRAWAL OF BIDS

- 6.1 Any bid may be withdrawn prior to the time designated for receipt of bids on written or electronic request. Electronic withdrawal of bids must be confirmed over the Bidder's signature by written notice postmarked on or before the date and time set for receipt of bids.
- 6.2 Withdrawn bids may be resubmitted up to the time designated for the receipt of bids.
- 6.3 No bids shall be withdrawn within thirty days, Saturdays, Sundays and legal holidays excluded, after the opening of the bids.

ARTICLE 7 - CONTRACT AWARD

- 7.1 The City is soliciting prices for services and supplies set forth in Bid Form 15-75, which incorporates Annual Bid Item Sheets attached hereto at pp. 78-84 below. It is the City's intent to award one (1) contract to the responsible and eligible bidder offering the lowest Total Bid Price. Accordingly, the City will award one (1) contract within sixty (60) days, Saturdays, Sundays, and legal holidays excluded, after the opening of bids.
- 7.2 The City of Newton reserves the right to waive minor informalities in or to reject any or all Bids if it be in the public interest to do so.
- 7.3 The City reserves the right to reject any bidder who has failed to pay any local taxes, fees, assessments, betterments, or any other municipal charge, unless the bidder has a pending abatement application or has entered into a payment agreement with the collector-treasurer.
- 7.4 As used herein, the term "lowest responsible and eligible Bidder" shall mean the Bidder (1) whose bid is the lowest of those bidders possessing the skill, ability and integrity necessary for the faithful performance of the work; (2) who has met all the requirements of the invitation for bids; (3) who shall certify that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (4) who, where the provisions of section eight B of chapter twenty-nine apply, shall have been determined to be qualified thereunder.

- 7.5 Subsequent to the award and within five (5) days, Saturday, Sundays and legal holidays excluded, after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver to the City a Contract in the form included in the Contract Documents in such number of counterparts as the City may require.
- 7.6 In the event that the City receives low bids in identical amount from two or more responsive and responsible Bidders, the City shall select the successful Bidder by a blind selection process chosen by the City such as flipping a coin or drawing names from a hat. The low Bidders who are under consideration will be invited to attend and observe the selection process.

ARTICLE 8 - TAXES

- 8.1 The Bidder shall not include in this bid any tax imposed upon the sale or rental of tangible personal property in this Commonwealth, such as any and all building materials, supplies, services and equipment required to complete the work.
- 8.2 The City is exempt from payment of the Massachusetts Sales Tax, and the Bidder shall not include any sales tax on its bid. The City's exemption Number is E-046-001-404.

ARTICLE 9 – PROPRIETARY SPECIFICATIONS

- 9.1 The City has used a proprietary specification to describe the supply listed in the specifications. Such specifications are permitted under M.G.L. c. 30, §39M(b), provided that the City state in writing that use of the proprietary specification is in its best interest and that it will accept an "equal" of the item specified. An item is considered equal if (i) it is at least equal in quality, durability, appearance, strength, and design; (ii) will perform the intended function at least equally; and (iii) conforms substantially, even with deviations, to the detailed requirements contained in the specifications. Bidders wishing to provide an equal item should do so with their bids. The City shall have the sole right to determine whether or not said item is equal.
- 9.2 The required determination and justification have been duly prepared, and a copy may be requested in accordance with the Massachusetts Public Records Law, M.G.L. c. 66, §10.

END OF SECTION

CITY OF NEWTON

DEPARTMENT OF PURCHASING

BID FORM #15-73

- A. The undersigned proposes to supply and deliver the materials specified below in full accordance with the Contract Documents and Project Manual supplied by the City of Newton entitled:

**SUPPLY, DELIVER & PLACE
BITUMINOUS CONCRETE OVERLAY OF REINFORCED CONCRETE PANELS
ON LOWELL AVENUE AND CENTRE STREET**

(See Accompanying Plans – 17 pages)

for the contract price specified below, subject to additions and deduction according to the terms of the specifications.

- B. This bid includes addenda number(s) _____, _____, _____, _____.
- C. The Contractor shall insert prices for each item in ink, in both words and figures.

_____ Dollars and \$ _____
(Contract price shall equal the Total Bid Price at of the attached Item Sheets, p. 85below)

COMPANY NAME: _____

- D. The undersigned has completed and submits herewith the following documents:
- ☐ Bidder's Qualifications and References Form, 2 pages
 - ☐ Certificate of Non-Collusion, 1 page
 - ☐ Debarment Letter, 1 page
 - ☐ IRS Form W-9, 1 page
 - ☐ Signed Bid Form, 2 pages
 - ☐ Item Sheets, 7 pages
 - ☐ A five percent (5%) bid deposit
- E. Prompt Payment Discounts. Bidders are encouraged to offer discounts in exchange for an expedited payment. Payments may be issued earlier than the general goal of within 30 days of receipt of the invoice only when in exchange for discounted prices. Discounts will not be considered in determining the lowest responsible bidder.

Prompt Payment Discount _____% _____ Days _____
Prompt Payment Discount _____% _____ Days _____
Prompt Payment Discount _____% _____ Days _____

- F. The undersigned agrees that, if selected as general contractor, s/he will within five days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the City of Newton, execute a contract in accordance with the terms of this bid **and furnish a labor and materials payment bond** of a surety company qualified to do business under the laws of the

commonwealth and satisfactory to the City of Newton in the **sum of 50% of the contract price**, the premiums for which are to be paid by the contractor and are included in the contract price.

The undersigned hereby certifies that s/he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that s/he will comply fully with all laws and regulations applicable to awards made subject to section forty-four A of M.G.L. Chapter 30, s 39M.

The undersigned certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (2) that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration ("OSHA") that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and (3) that all employees to be employed in the work subject to this bid have successfully completed a course in construction safety and health approved by the United States OSHA that is at least 10 hours in duration. The undersigned understands that any employee found on a worksite subject to this section without documentation of successful completion of a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration shall be subject to immediate removal.

The undersigned further certifies under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

The undersigned further certifies under the penalties of perjury that they have familiarized themselves with the changes to the Prevailing Wage Rates, Price Adjustment Clauses, in accordance to Chapter 303 Acts of 2008.

Date _____

(Name of General Bidder)

BY: _____

(Printed Name and Title of Signatory)

(Business Address)

(City, State Zip)

(Telephone) / (FAX)

(E-mail address)

NOTE: If the bidder is a corporation, indicate state of incorporation under signature, and affix corporate seal; if a partnership, give full names and residential addresses of all partners; if an individual, give residential address if different from business address; and, if operating as a d/b/a give full legal identity. Attach additional pages as necessary.

END OF SECTION

CITY OF NEWTON

BIDDER'S QUALIFICATIONS AND REFERENCES FORM

All questions must be answered, and the data given must be clear and comprehensive. Please type or print legibly. If necessary, add additional sheet for starred items. This information will be utilized by the City of Newton for purposes of determining bidder responsiveness and responsibility with regard to the requirements and specifications of the Contract.

1. FIRM NAME: _____
2. WHEN ORGANIZED: _____
3. INCORPORATED? ____ YES ____ NO DATE AND STATE OF INCORPORATION: _____
4. IS YOUR BUSINESS A **MBE**? ____ YES ____ NO **WBE**? ____ YES ____ NO or **MWBE**? ____ YES ____ NO
- * 5. LIST ALL CONTRACTS CURRENTLY ON HAND, SHOWING CONTRACT AMOUNT AND ANTICIPATED DATE OF COMPLETION:

- * 6. HAVE YOU EVER FAILED TO COMPLETE A CONTRACT AWARDED TO YOU?
____ YES ____ NO
IF YES, WHERE AND WHY?

- * 7. HAVE YOU EVER DEFAULTED ON A CONTRACT? ____ YES ____ NO
IF YES, PROVIDE DETAILS.

- * 8. LIST YOUR VEHICLES/EQUIPMENT AVAILABLE FOR THIS CONTRACT:

- * 9. IN THE SPACES FOLLOWING, PROVIDE INFORMATION REGARDING CONTRACTS COMPLETED BY YOUR FIRM SIMILAR IN NATURE TO THE PROJECT BEING BID. A MINIMUM OF FOUR (4) CONTRACTS SHALL BE LISTED. PUBLICLY BID CONTRACTS ARE PREFERRED, BUT NOT MANDATORY.

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____

DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

10. The undersigned certifies that the information contained herein is complete and accurate and hereby authorizes and requests any person, firm, or corporation to furnish any information requested by the City of Newton in verification of the recitals comprising this statement of Bidder's qualifications and experience.

DATE: _____ BIDDER: _____

SIGNATURE: _____

PRINTED NAME: _____ TITLE: _____

END OF SECTION

CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word “person” shall mean any natural person, business, partnership, corporation, union, committee club, or other organization, entity, or group or individuals.

(Signature of individual)

Name of Business



Mayor
Setti D. Warren

Purchasing Department

Nicholas Read ☎ *Chief Procurement Officer*
1000 Commonwealth Avenue
Newton Centre, MA 02459-1449
purchasing@newtonma.gov

Telephone
(617) 796-1220
Fax:
(617) 796-1227
TDD/TTY
(617) 796-1089

Date

Vendor

Re: Debarment Letter for Invitation For Bid #15-73

As a potential vendor on the above contract, the City requires that you provide a debarment/suspension certification indicating that you are in compliance with the below Federal Executive Order. Certification can be done by completing and signing this form.

Debarment:

Federal Executive Order (E.O.) 12549 “Debarment and Suspension“ requires that all contractors receiving individual awards, using federal funds, and all sub-recipients certify that the organization and its principals are not debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency from doing business with the Federal Government.

I hereby certify under pains and penalties of perjury that neither I nor any principal(s) of the Company identified below is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

_____(Name)
_____(Company)
_____(Address)
_____(Address)
PHONE _____ FAX _____
EMAIL _____

Signature

Date

If you have questions, please contact Nicholas Read, Chief Procurement Officer at (617) 796-1220.

**Request for Taxpayer
Identification Number and Certification**

Give form to the
requester. Do not
send to the IRS.

Print or type See Specific Instructions on page 2.	Name (as shown on your income tax return)	
	Business name, if different from above	
	Check appropriate box: <input type="checkbox"/> Individual/Sole proprietor <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶ <input type="checkbox"/> Other (see instructions) ▶	
	<input checked="" type="checkbox"/> Exempt payee	
	Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
City, state, and ZIP code		
List account number(s) here (optional)		

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number
or
Employer identification number

Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
- I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here	Signature of U.S. person ▶	Date ▶	Name
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
- Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

CONTRACT FORMS

The awarded bidder will be required to complete and submit documents substantially similar in form to the following.

These forms may need to be modified on account of changed circumstances, and are provided for informational purposes only.

CITY - CONTRACTOR AGREEMENT

CONTRACT NO. C -

THIS AGREEMENT made this ____ day of _____ in the year Two Thousand and Fifteen by and between the CITY OF NEWTON, a municipal corporation organized and existing under the laws of the Commonwealth of Massachusetts, hereinafter referred to as the CITY, acting through its Chief Procurement Officer, but without personal liability to him, and hereinafter referred to as the CONTRACTOR.

The parties hereto for the considerations hereinafter set forth agree as follows:

ARTICLE 1. STATEMENT OF WORK. The Contractor shall furnish all labor, materials, and equipment and perform all work required in strict accordance with the Contract Documents for the following project:

SUPPLY, DELIVER & PLACE BITUMINOUS CONCRETE OVERLAY OF REINFORCED CONCRETE PANELS ON LOWELL AVENUE AND CENTRE STREET

ARTICLE 2. TIME OF COMPLETION. The Contractor shall commence work under this Contract on the date specified in the written notice of the City to proceed and shall fully complete all work hereunder within the time specified in the Summary of Work and Specific Work Requirements of the Project Manual. Time is of the essence with regard to this contract. Failure to complete within the time specified shall be subject to the assessment of liquidated damages in accordance with the provisions contained in the Project Manual.

ARTICLE 3. THE CONTRACT PRICE. The City shall pay the Contractor for the full and satisfactory performance of the Contract, in current funds a sum not to exceed:

(\$)

ARTICLE 4. CONTRACT DOCUMENTS. The Contract Documents consist of the following documents which are either attached to this Agreement or are incorporated herein by reference:

- a. This CITY-CONTRACTOR Agreement;
- b. The City's Invitation For Bid # #15-73 issued by the Purchasing Department;
- c. The Project Manual for: **Supply, Deliver & Place Bituminous Concrete Overlay of Reinforced Concrete Panels on Lowell Avenue and Centre Street** including the Instructions to Bidders; General Conditions; Special Conditions; MWBE/AA Requirements, Wage Rate Requirements and Wage Rate Schedule(s) including any updated prevailing wage rate schedules if applicable; The Supplementary Special Conditions; General Requirements and Project Specifications; and Drawings, if included or referenced therein;
- d. Addenda Number(s)_____;
- e. The Bid Response of the CONTRACTOR submitted for this Project and accompanying documents and certifications;
- f. Certificate(s) of Insurance and surety bond(s) submitted by the CONTRACTOR in connection with this Project;
- g. Duly authorized and executed Amendments, Change Orders or Work Orders issued by the CITY after execution of this CITY-CONTRACTOR Agreement.

This CITY-CONTRACTOR Agreement, together with the other documents enumerated in this Article, constitute the entire Agreement between the CITY and the CONTRACTOR.

ARTICLE 5. ALTERNATES. The following Alternates have been accepted and their costs are included in the Contract Price stated in Article 3 of this Agreement:

Alternates: _____

ARTICLE 6. APPLICABLE STATUTES. All applicable federal, state and local laws and regulations are incorporated herein by reference and the Contractor agrees to comply with same.

IN WITNESS WHEREOF, the parties have caused this instrument to be executed under seal the day and year first above written.

CONTRACTOR

CITY OF NEWTON

By _____
Print Name _____
Title _____
Date _____

By _____
Chief Procurement Officer
Date _____

Affix Corporate Seal Here

By _____
Commissioner of Public Works

Date _____

Approved as to Legal Form and Character

City funds are available in the following
account number:
33N401G-586002 (Chapter 90) -

By _____
Associate City Solicitor

I further certify that the Mayor, or his
designee, is authorized to execute contracts
and approve change orders

Date _____

CONTRACT & BONDS ARE APPROVED

By _____
Comptroller of Accounts

By _____
Mayor or his designee

Date _____

Date _____

CERTIFICATE OF AUTHORITY - CORPORATE

1. I hereby certify that I am the Clerk/Secretary of _____
(insert full name of Corporation)
2. corporation, and that _____
(insert the name of officer who signed the **contract and bonds.**)
3. is the duly elected _____
(insert the title of the officer in line 2)
4. of said corporation, and that on _____
(insert a date that is ***ON OR BEFORE*** the date the officer signed the **contract and bonds.**)

at a duly authorized meeting of the Board of Directors of said corporation, at which all the directors were present or waived notice, it was voted that

5. _____ the _____
(insert **name** from line 2) (insert **title** from line 3)

of this corporation be and hereby is authorized to execute contracts and bonds in the name and on behalf of said corporation, and affix its Corporate Seal thereto, and such execution of any contract of obligation in this corporation's name and on its behalf, with or without the Corporate Seal, shall be valid and binding upon this corporation; and that the above vote has not been amended or rescinded and remains in full force and effect as of the date set forth below.

6. ATTEST: _____ *AFFIX CORPORATE*
(Signature of **Clerk or Secretary**)* *SEAL HERE*
7. Name: _____
(Please print or type name in line 6)*
8. Date: _____
(insert a date that is ***ON OR AFTER*** the date the officer signed the **contract and bonds.**)

* The name and signature inserted in lines 6 & 7 **must** be that of the **Clerk or Secretary** of the corporation.

CERTIFICATION OF TAX COMPLIANCE

Pursuant to M.G.L. c.62C, §49A and requirements of the City, the undersigned acting on behalf of the Contractor certifies under the penalties of perjury that the Contractor is in compliance with all laws of the Commonwealth relating to taxes including payment of all local taxes, fees, assessments, betterments and any other local or municipal charges (unless the Contractor has a pending abatement application or has entered into a payment agreement with the entity to which such charges were owed), reporting of employees and contractors, and withholding and remitting child support.*

**Signature of Individual
or Corporate Contractor (Mandatory)

*** Contractor's Social Security Number
(Voluntary) or Federal Identification Number

Print Name: _____

By: _____
Corporate Officer
(Mandatory, if applicable)

Date: _____

Print Name: _____

* The provision in this Certification relating to child support applies only when the Contractor is an individual.

** Approval of a contract or other agreement will not be granted until the City receives a signed copy of this Certification.

*** Your social security number may be furnished to the Massachusetts Department of Revenue to determine whether you have met tax filing or tax payment obligations. Providers who fail to correct their non-filing or delinquency will not have a contract or other agreement issued, renewed, or extended.

CITY OF NEWTON, MASSACHUSETTS

PAYMENT BOND

Know All Men By These Presents:

That we, _____, as PRINCIPAL, and _____, as SURETY, are held and firmly bound unto the City of Newton as Obligee, in the sum of _____ dollars (\$_____) to be paid to the Obligee, for which payments well and truly to be made, we bind ourselves, our respective heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas, the said PRINCIPAL has made a contract with the Obligee, bearing the date of _____, 2015 for the construction of _____ in Newton, Massachusetts.
(Project Title)

Now, the conditions of this obligation are such that if the PRINCIPAL and all Sub-contractors under said contract shall pay for all labor performed or furnished and for all materials used or employed in said contract and in any and all duly authorized modifications, alterations, extensions of time, changes or additions to said contract that may hereafter be made, notice to the SURETY of such modifications, alterations, extensions of time, changes or additions being hereby waived, the foregoing to include any other purposes or items set out in, and to be subject to, provisions of M.G.L. c. 30, sec. 39A, and M.G.L. c. 149 sec. 29, as amended, then this obligation shall become null and void; otherwise it shall remain in full force, virtue and effect.

In Witness Whereof, the PRINCIPAL and SURETY have hereto set their hands and seals this ____day of____, 2015.

PRINCIPAL

SURETY

BY _____

BY _____

(SEAL)

(ATTORNEY-IN-FACT) (SEAL)

(Title)

ATTEST: _____

ATTEST: _____

**CITY OF NEWTON, MASSACHUSETTS
PURCHASING DEPARTMENT
GENERAL TERMS AND CONDITIONS**

1. The right is reserved to reject any and all bids, to waive minor informalities, and to make award as may be determined to be in the best interest of the City of Newton.
2. Prices quoted must include delivery to the City , as specified on the Work Order.
3. No charges will be allowed for packing, crating, freight, Express or cartage unless specifically stated and included in the bid.
4. The award to the successful bidder may be canceled if successful bidder shall fail to prosecute the work with promptness and diligence.
5. Time in connection with discount offered will be computed from the date of delivery to the City, as specified on Work Order, or from date correct invoice is received by the City, if the latter date is later than the date of delivery.
6. The successful bidder shall replace, repair or make good, without cost to the City, any defects or faults arising within one (1) year after date of acceptance of articles furnished hereunder (acceptance not to be unreasonably delayed) resulting from imperfect or defective work done or materials furnished by the Seller.
7. The Contractor shall indemnify and save harmless the City and all persons acting for on behalf of it from all suits and claims against them, or any of them, arising from or occasioned by the use of any material, equipment or apparatus, or any part thereof, which infringes or is alleged to infringe on any patent rights. In case such material, equipment or apparatus, or any part thereof, in any such suit is held to constitute infringement, the Seller, within a reasonable time, will at its expense, and as the City may elect, replace such material, equipment or apparatus with non-infringing material, equipment or apparatus, or remove the material, equipment or apparatus, and refund the sums paid therefor.
8. The successful bidder shall comply with all applicable Federal State and Local laws and regulations.
9. Purchases made by the City are exempt from Federal excise taxes and bid prices must exclude any such taxes. Tax exemption certificates will be furnished upon request.
10. If so stated in the Invitation For Bid the successful bidder will be required to furnish a performance and/or a labor and material payment bond, in an amount, in a form and with a surety satisfactory to the City. The bidder shall be responsible for the cost of the bond(s).

If the Invitation for Bids requires bid surety, this surety shall be in the form of a cash, bid bond, cashier's check, treasurer's check, or certified check on a responsible bank, payable to the City of Newton, and must be filed with the original bid in the Office of the Purchasing Agent. Failure to do so will lead to rejection of bid. The bid surety will be returned to the successful bidder within seven (7) days execution of awarded, and approval by the City of performance and/or payment bond(s).

The bid surety covers the City for damages when a bidder withdraws its bid after the bid submission date. **Be advised that to the extent permitted by the law the City will retain all bid deposits for withdrawn bids.**

11. Verbal orders are not binding on the City and deliveries made or work done without formal Work Order or Contract are at the risk of the Contractor and may result in an unenforceable claim.
12. The Contractor shall agree to indemnify, defend and hold the City harmless from any and all claims arising out of the performance of this contract.
13. "Equal" - An item equal to that named or described in the specifications of the contract may be furnished by the Contractor and the naming of any commercial name, trademark or other identification shall not be construed to exclude any item or manufacturer not mentioned by name or as limiting competition but shall establish a standard of equality only. An item shall be considered equal to the item so named or described if (1) it is at least equal in quality, durability, appearance, strength and design; (2) it will perform at least equally the function imposed by the general design for the work being contracted for or the material being purchased; and (3) it conforms substantially, even with deviations, to the detailed requirements for the item in the specifications. The name and identification of all materials other than the one specifically named shall be submitted to the City in writing for approval, prior to purchase, use or fabrication of such items. Subject to the provisions of M.G.L., Ch. 30, Sec. 39J, approval shall be at the sole discretion of the City, shall be in writing to be effective, and the decision of the City

shall be final. The City may require tests of all materials so submitted to establish quality standards at the Vendor's expense. All directions, specifications and recommendations by manufacturers for installation, handling, storing, adjustment and operation of their equipment shall be complied with; responsibility for proper performance shall continue to rest with the Contractor.

For the use of material other than the one specified, the Contractor shall assume the cost of and responsibility for satisfactorily accomplishing all changes in the work as shown. If no manufacturer is named, the Contractor shall submit the product he intends to use for approval of the City.

Except as otherwise provided for by the provisions of M.G.L., Ch. 30, Sec. 39J, the Contractor shall not have any right of appeal from the decision of the City condemning any materials furnished if the Vendor fails to obtain the approval for substitution under this clause. If any substitution is more costly, the Vendor shall pay for such costs."

14. Notice is hereby given that the City of Newton Minority/Women Business Enterprise Plan dated December 1999 is applicable to all City of Newton contracts for materials and supplies. A copy of this plan may be obtained from the Purchasing Department.

15. Right To Know:

Any vendor who receives an order or orders resulting from this invitation agrees to submit a Material Safety Data Sheet (MSDS) for each toxic or hazardous substance or mixture containing such substance, pursuant to M.G.L., Ch. 111F, SS8, 9 and 10 and the regulations contained in 441 CMR SS 21.06 when deliveries are made. The vendor agrees to deliver all containers properly labeled pursuant to M.G.L. Ch. 111F, SS 7 and the regulations contained in 441 CMR SS 21.05. Failure to submit an MSDS and/or label on each container will place the vendor in noncompliance with the work order. Failure to furnish MSDSs and/or labels on each container may result in civil or criminal penalties, including bid debarment and action to prevent the vendor from selling said substances or mixtures containing said substances within the Commonwealth. All vendors furnishing substances or mixtures subject to Chapter 111F of the M.G.L. are cautioned to obtain and read the law and rules and regulations referred to above. Copies can be obtained from the State House Book Store, Secretary of State, State House, Room 117, Boston, MA 02133, (617-727-2834) for \$2.00 plus \$.65 postage.

17. INSURANCE REQUIREMENTS

The Contractor shall provide insurance coverage as listed below. This insurance shall be provided at the Contractor's expense and shall be in full force and effect during the full term of this Contract.

WORKER'S COMPENSATION

Worker's Compensation: Per M.G.L. c.. 149, s. 34 and c.. 152 as amended.

COMMERCIAL GENERAL LIABILITY

Personal Injury	\$500,000 each occurrence \$1,000,000 aggregate
Property Damage	\$500,000 each occurrence \$1,000,000 aggregate

VEHICLE LIABILITY

Personal Injury	\$500,000 each person \$1,000,000 aggregate
Property Damage	\$300,000 each occurrence \$500,000 aggregate

The City shall be named as additional insured on the Contractor's Liability Policies.

The Contractor shall not commence the work until proof of compliance with this has been furnished to the City by submitting one copy of a properly endorsed insurance certificate issued by a company authorized to write insurance in the Commonwealth. This certificate shall indicate that the contractual liability coverage is in force.

The Contractor shall file the original and one certified copy of all policies with the City within ten (10) days after contract award. If the City is damaged by the Contractor's failure to maintain such insurance and to so notify the City, then the Contractor shall be responsible for all reasonable costs attributable thereto.

Cancellation of any insurance required by this contract, whether by the insurer or the insured, shall not be valid unless written notice thereof is given by the party proposing cancellation to the other party and City at least thirty days prior to the effective date thereof, which shall be expressed in said notice.

**FAILURE TO COMPLY WITH THESE TERMS AND CONDITIONS COULD RESULT IN THE
CANCELLATION OF YOUR CONTRACT.**

CITY OF NEWTON

WAGE RATE REQUIREMENTS

1. GENERAL

- A. This section summarizes the requirements for the payment of wages to laborers and mechanics employed under the Contract.
- B. Other duties and requirements of law which may not be specified in this section apply and are inherently a part of the Contract.

2. WAGE RATES

- A. The rate per hour to be paid to mechanics, apprentices, teamsters, chauffeurs, and laborers employed on the Work shall not be less than the rate of wages in the attached "Minimum Wage Rates" as determined by the Commissioner of Labor and Industries. This schedule shall continue to be the minimum rate of wages for said employees during the life of this Contract.
- B. Keep posted on the site a legible copy of said schedule. Keep on file the wage rates and classifications of labor employed on this Work in order that they may be available for inspection by the Owner, Administrator, or the Architect.
- C. Apprentices employed pursuant to this determination of wage rates must be registered and approved by the State Apprenticeship Council wherever rates for journeymen or apprentices are not listed.
- D. Pay reserve police officers employed on the Work the prevailing rate of wages paid to regular police officers as required by M.G.L. c149, Sec. 34B, as amended. Such police officers shall be covered by Workmen's Compensation Insurance and Employers Liability Insurance by the Contractor.
- E. The Contractor and all subcontractors shall, on a weekly basis throughout the term of the contract, provide to the City of Newton certified payroll affidavits verifying compliance with M.G.L. c.149, Sec. 27, 27A and 27B. The Contractor is obligated to provide such records to the City directly on a weekly basis. The City may assess a penalty of \$100 for each day beyond the required submission date that such records are received, which amount shall be deducted from any amounts to the Contractor from the City. In the event of chronic late submissions, the City shall report the same to the Office of the Attorney General.
- F. The Contractor and all subcontractors shall provide a Statement of Compliance within 15 days of the completion of its portion of the work. This statement shall be submitted to the Owner on the form found elsewhere in this section.
- G. The Contractor shall maintain accurate and complete records, including payroll records, during the Contract term and for three years thereafter.

END OF SECTION



CHARLES D. BAKER
Governor

KARYN E. POLITO
Lt. Governor

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS

Prevailing Wage Rates

As determined by the Director under the provisions of the
Massachusetts General Laws, Chapter 149, Sections 26 to 27H

RONALD L. WALKER, II
Secretary
HEATHER E. ROWE
Director

Awarding Authority: City of Newton
Contract Number: #15-73 **City/Town:** NEWTON
Description of Work: Bituminous Concrete Overlay of Reinforced Concrete Panels on Lowell Avenue and Centre Street

Job Location: Various Location

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

- This wage schedule applies only to the specific project referenced at the top of this page and uniquely identified by the "Wage Request Number" on all pages of this schedule.
- An Awarding Authority must request an updated wage schedule from the Department of Labor Standards ("DLS") if it has not opened bids or selected a contractor within 90 days of the date of issuance of the wage schedule. For CM AT RISK projects (bid pursuant to G.L. c.149A), the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work must be within 90-days of the wage schedule issuance date.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project as required by M.G.L. c. 149, § 27. The wage schedule shall be made a part of the contract awarded for the project. The wage schedule must be posted in a conspicuous place at the work site for the life of the project in accordance with M.G.L. c. 149 § 27. The wages listed on the wage schedule must be paid to employees performing construction work on the project whether they are employed by the prime contractor, a filed sub-bidder, or any sub-contractor.
- All apprentices working on the project are required to be registered with the Massachusetts Division of Apprentices Standards (DAS). Apprentice must keep his/her apprentice identification card on his/her person during all work hours on the project. An apprentice registered with DAS may be paid the lower apprentice wage rate at the applicable step as provided on the prevailing wage schedule. **If an apprentice rate is not listed on the prevailing wage schedule for the trade in which an apprentice is registered with the DAS, the apprentice must be paid the journeyworker's rate for the trade.**
- The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule. Awarding authorities are required to request these updates no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor. For multi-year CM AT RISK projects, awarding authority must request an annual update no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. Contractors are required to obtain the wage schedules from awarding authorities, and to pay no less than these rates to covered workers. The annual update requirement is not applicable to 27F "rental of equipment" contracts.
- Every contractor or subcontractor which performs construction work on the project is required to submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain: the employee's name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. A sample of a payroll reporting form may be obtained at <http://www.mass.gov/dols/pw>.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative obligation to inquire with DLS at (617) 626-6953.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may report the violation to the Fair Labor Division of the office of the Attorney General at (617) 727-3465.
- Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and criminal penalties.

Issue Date: 02/24/2015

Wage Request Number: 20150224-067

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction						
(2 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2014	\$32.40	\$9.91	\$9.33	\$0.00	\$51.64
	06/01/2015	\$32.75	\$9.91	\$9.33	\$0.00	\$51.99
	08/01/2015	\$32.75	\$10.41	\$9.33	\$0.00	\$52.49
	12/01/2015	\$32.75	\$10.41	\$10.08	\$0.00	\$53.24
	06/01/2016	\$33.25	\$10.41	\$10.08	\$0.00	\$53.74
	08/01/2016	\$33.25	\$10.91	\$10.08	\$0.00	\$54.24
	12/01/2016	\$33.25	\$10.91	\$10.89	\$0.00	\$55.05
(3 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2014	\$32.47	\$9.91	\$9.33	\$0.00	\$51.71
	06/01/2015	\$32.82	\$9.91	\$9.33	\$0.00	\$52.06
	08/01/2015	\$32.82	\$10.41	\$9.33	\$0.00	\$52.56
	12/01/2015	\$32.82	\$10.41	\$10.08	\$0.00	\$53.31
	06/01/2016	\$33.32	\$10.41	\$10.08	\$0.00	\$53.81
	08/01/2016	\$33.32	\$10.91	\$10.08	\$0.00	\$54.31
	12/01/2016	\$33.32	\$10.91	\$10.89	\$0.00	\$55.12
(4 & 5 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2014	\$32.59	\$9.91	\$9.33	\$0.00	\$51.83
	06/01/2015	\$32.94	\$9.91	\$9.33	\$0.00	\$52.18
	08/01/2015	\$32.94	\$10.41	\$9.33	\$0.00	\$52.68
	12/01/2015	\$32.94	\$10.41	\$10.08	\$0.00	\$53.43
	06/01/2016	\$33.44	\$10.41	\$10.08	\$0.00	\$53.93
	08/01/2016	\$33.44	\$10.91	\$10.08	\$0.00	\$54.43
	12/01/2016	\$33.44	\$10.91	\$10.89	\$0.00	\$55.24
ADS/SUBMERSIBLE PILOT <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$87.36	\$9.80	\$18.17	\$0.00	\$115.33
	08/01/2015	\$90.51	\$9.80	\$18.17	\$0.00	\$118.48
AIR TRACK OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2014	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	06/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	12/01/2015	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	06/01/2016	\$37.60	\$7.30	\$12.95	\$0.00	\$57.85
	12/01/2016	\$38.60	\$7.30	\$12.95	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. <i>HEAT & FROST INSULATORS LOCAL 6 (BOSTON)</i>	12/01/2014	\$32.48	\$10.40	\$5.95	\$0.00	\$48.83
	06/01/2015	\$33.43	\$10.40	\$5.95	\$0.00	\$49.78
	12/01/2015	\$34.38	\$10.40	\$5.95	\$0.00	\$50.73
ASPHALT RAKER <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$42.39	\$10.00	\$14.30	\$0.00	\$66.69
	06/01/2015	\$43.14	\$10.00	\$14.30	\$0.00	\$67.44
	12/01/2015	\$44.39	\$10.00	\$14.30	\$0.00	\$68.69
	06/01/2016	\$45.14	\$10.00	\$14.30	\$0.00	\$69.44
	12/01/2016	\$46.39	\$10.00	\$14.30	\$0.00	\$70.69
	06/01/2017	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	12/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69
<hr/>						
Issue Date: 02/24/2015	Wage Request Number: 20150224-067		Page 2 of 38			

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BACKHOE/FRONT-END LOADER	12/01/2014	\$42.39	\$10.00	\$14.30	\$0.00	\$66.69
OPERATING ENGINEERS LOCAL 4	06/01/2015	\$43.14	\$10.00	\$14.30	\$0.00	\$67.44
	12/01/2015	\$44.39	\$10.00	\$14.30	\$0.00	\$68.69
	06/01/2016	\$45.14	\$10.00	\$14.30	\$0.00	\$69.44
	12/01/2016	\$46.39	\$10.00	\$14.30	\$0.00	\$70.69
	06/01/2017	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	12/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
LABORERS - ZONE 1	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER	12/01/2014	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
LABORERS - ZONE 1	06/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	12/01/2015	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	06/01/2016	\$37.60	\$7.30	\$12.95	\$0.00	\$57.85
	12/01/2016	\$38.60	\$7.30	\$12.95	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
BOILER MAKER	01/01/2010	\$37.70	\$6.97	\$11.18	\$0.00	\$55.85
BOILERMAKERS LOCAL 29						

Apprentice - BOILERMAKER - Local 29

Effective Date - 01/01/2010

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	\$24.51	\$6.97	\$11.18	\$0.00	\$42.66
2	65	\$24.51	\$6.97	\$11.18	\$0.00	\$42.66
3	70	\$26.39	\$6.97	\$11.18	\$0.00	\$44.54
4	75	\$28.28	\$6.97	\$11.18	\$0.00	\$46.43
5	80	\$30.16	\$6.97	\$11.18	\$0.00	\$48.31
6	85	\$32.05	\$6.97	\$11.18	\$0.00	\$50.20
7	90	\$33.93	\$6.97	\$11.18	\$0.00	\$52.08
8	95	\$35.82	\$6.97	\$11.18	\$0.00	\$53.97

Notes:

Apprentice to Journeyworker Ratio:1:5

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	02/01/2015	\$48.96	\$10.18	\$18.50	\$0.00	\$77.64
BRICKLAYERS LOCAL 3 (NEWTON)	08/01/2015	\$49.86	\$10.18	\$18.57	\$0.00	\$78.61
	02/01/2016	\$50.43	\$10.18	\$18.57	\$0.00	\$79.18
	08/01/2016	\$51.33	\$10.18	\$18.65	\$0.00	\$80.16
	02/01/2017	\$51.90	\$10.18	\$18.65	\$0.00	\$80.73

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - BRICK/PLASTER/CEMENT MASON - Local 3 Newton

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.48	\$10.18	\$18.50	\$0.00	\$53.16
2	60	\$29.38	\$10.18	\$18.50	\$0.00	\$58.06
3	70	\$34.27	\$10.18	\$18.50	\$0.00	\$62.95
4	80	\$39.17	\$10.18	\$18.50	\$0.00	\$67.85
5	90	\$44.06	\$10.18	\$18.50	\$0.00	\$72.74

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.93	\$10.18	\$18.57	\$0.00	\$53.68
2	60	\$29.92	\$10.18	\$18.57	\$0.00	\$58.67
3	70	\$34.90	\$10.18	\$18.57	\$0.00	\$63.65
4	80	\$39.89	\$10.18	\$18.57	\$0.00	\$68.64
5	90	\$44.87	\$10.18	\$18.57	\$0.00	\$73.62

Notes:

Apprentice to Journeyworker Ratio:1:5

BULLDOZER/GRADER/SCRAPER	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
OPERATING ENGINEERS LOCAL 4	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
CAISSON & UNDERPINNING BOTTOM MAN	12/01/2014	\$35.70	\$7.30	\$13.15	\$0.00	\$56.15
LABORERS - FOUNDATION AND MARINE	06/01/2015	\$36.45	\$7.30	\$13.15	\$0.00	\$56.90
	12/01/2015	\$37.20	\$7.30	\$13.15	\$0.00	\$57.65
	06/01/2016	\$37.95	\$7.30	\$13.15	\$0.00	\$58.40
	12/01/2016	\$38.95	\$7.30	\$13.15	\$0.00	\$59.40
For apprentice rates see "Apprentice- LABORER"						
CAISSON & UNDERPINNING LABORER	12/01/2014	\$34.55	\$7.30	\$13.15	\$0.00	\$55.00
LABORERS - FOUNDATION AND MARINE	06/01/2015	\$35.30	\$7.30	\$13.15	\$0.00	\$55.75
	12/01/2015	\$36.05	\$7.30	\$13.15	\$0.00	\$56.50
	06/01/2016	\$36.80	\$7.30	\$13.15	\$0.00	\$57.25
	12/01/2016	\$37.80	\$7.30	\$13.15	\$0.00	\$58.25
For apprentice rates see "Apprentice- LABORER"						

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CAISSON & UNDERPINNING TOP MAN <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2014	\$34.55	\$7.30	\$13.15	\$0.00	\$55.00
	06/01/2015	\$35.30	\$7.30	\$13.15	\$0.00	\$55.75
	12/01/2015	\$36.05	\$7.30	\$13.15	\$0.00	\$56.50
	06/01/2016	\$36.80	\$7.30	\$13.15	\$0.00	\$57.25
	12/01/2016	\$37.80	\$7.30	\$13.15	\$0.00	\$58.25
For apprentice rates see "Apprentice- LABORER"						
CARBIDE CORE DRILL OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
CARPENTER <i>CARPENTERS -ZONE 2 (Eastern Massachusetts)</i>	09/01/2014	\$35.35	\$9.80	\$16.11	\$0.00	\$61.26
	03/01/2015	\$36.12	\$9.80	\$16.11	\$0.00	\$62.03

Apprentice - CARPENTER - Zone 2 Eastern MA

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$17.68	\$9.80	\$1.57	\$0.00	\$29.05
2	60	\$21.21	\$9.80	\$1.57	\$0.00	\$32.58
3	70	\$24.75	\$9.80	\$11.40	\$0.00	\$45.95
4	75	\$26.51	\$9.80	\$11.40	\$0.00	\$47.71
5	80	\$28.28	\$9.80	\$12.97	\$0.00	\$51.05
6	80	\$28.28	\$9.80	\$12.97	\$0.00	\$51.05
7	90	\$31.82	\$9.80	\$14.54	\$0.00	\$56.16
8	90	\$31.82	\$9.80	\$14.54	\$0.00	\$56.16

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.06	\$9.80	\$1.57	\$0.00	\$29.43
2	60	\$21.67	\$9.80	\$1.57	\$0.00	\$33.04
3	70	\$25.28	\$9.80	\$11.40	\$0.00	\$46.48
4	75	\$27.09	\$9.80	\$11.40	\$0.00	\$48.29
5	80	\$28.90	\$9.80	\$12.97	\$0.00	\$51.67
6	80	\$28.90	\$9.80	\$12.97	\$0.00	\$51.67
7	90	\$32.51	\$9.80	\$14.54	\$0.00	\$56.85
8	90	\$32.51	\$9.80	\$14.54	\$0.00	\$56.85

Notes:

Apprentice to Journeyworker Ratio:1:5

CEMENT MASONRY/PLASTERING <i>BRICKLAYERS LOCAL 3 (NEWTON)</i>	01/01/2015	\$44.90	\$10.90	\$18.71	\$1.30	\$75.81
	07/01/2015	\$45.82	\$10.90	\$18.71	\$1.30	\$76.73
	01/01/2016	\$46.44	\$10.90	\$18.71	\$1.30	\$77.35

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - CEMENT MASONRY/PLASTERING - Eastern Mass (Newton)

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.45	\$10.90	\$12.21	\$1.30	\$46.86
2	60	\$26.94	\$10.90	\$13.71	\$1.30	\$52.85
3	65	\$29.19	\$10.90	\$14.71	\$1.30	\$56.10
4	70	\$31.43	\$10.90	\$15.71	\$1.30	\$59.34
5	75	\$33.68	\$10.90	\$16.71	\$1.30	\$62.59
6	80	\$35.92	\$10.90	\$17.71	\$1.30	\$65.83
7	90	\$40.41	\$10.90	\$18.71	\$1.30	\$71.32

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.91	\$10.90	\$12.21	\$1.30	\$47.32
2	60	\$27.49	\$10.90	\$13.71	\$1.30	\$53.40
3	65	\$29.78	\$10.90	\$14.71	\$1.30	\$56.69
4	70	\$32.07	\$10.90	\$15.71	\$1.30	\$59.98
5	75	\$34.37	\$10.90	\$16.71	\$1.30	\$63.28
6	80	\$36.66	\$10.90	\$17.71	\$1.30	\$66.57
7	90	\$41.24	\$10.90	\$18.71	\$1.30	\$72.15

Notes:

Steps 3,4 are 500 hrs. All other steps are 1,000 hrs.

Apprentice to Journeyworker Ratio:1:3

CHAIN SAW OPERATOR	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
LABORERS - ZONE 1	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES	12/01/2014	\$43.39	\$10.00	\$14.30	\$0.00	\$67.69
OPERATING ENGINEERS LOCAL 4	06/01/2015	\$44.14	\$10.00	\$14.30	\$0.00	\$68.44
	12/01/2015	\$45.39	\$10.00	\$14.30	\$0.00	\$69.69
	06/01/2016	\$46.14	\$10.00	\$14.30	\$0.00	\$70.44
	12/01/2016	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	06/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69
	12/01/2017	\$49.39	\$10.00	\$14.30	\$0.00	\$73.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
COMPRESSOR OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$29.40	\$10.00	\$14.30	\$0.00	\$53.70
	06/01/2015	\$29.92	\$10.00	\$14.30	\$0.00	\$54.22
	12/01/2015	\$30.79	\$10.00	\$14.30	\$0.00	\$55.09
	06/01/2016	\$31.31	\$10.00	\$14.30	\$0.00	\$55.61
	12/01/2016	\$32.18	\$10.00	\$14.30	\$0.00	\$56.48
	06/01/2017	\$32.87	\$10.00	\$14.30	\$0.00	\$57.17
	12/01/2017	\$33.56	\$10.00	\$14.30	\$0.00	\$57.86
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DELEADER (BRIDGE) <i>PAINTERS LOCAL 35 - ZONE 2</i>	01/01/2015	\$47.66	\$7.85	\$16.10	\$0.00	\$71.61
	07/01/2015	\$48.56	\$7.85	\$16.10	\$0.00	\$72.51
	01/01/2016	\$49.51	\$7.85	\$16.10	\$0.00	\$73.46
	07/01/2016	\$50.46	\$7.85	\$16.10	\$0.00	\$74.41
	01/01/2017	\$51.41	\$7.85	\$16.10	\$0.00	\$75.36

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.83	\$7.85	\$0.00	\$0.00	\$31.68
2	55	\$26.21	\$7.85	\$3.66	\$0.00	\$37.72
3	60	\$28.60	\$7.85	\$3.99	\$0.00	\$40.44
4	65	\$30.98	\$7.85	\$4.32	\$0.00	\$43.15
5	70	\$33.36	\$7.85	\$14.11	\$0.00	\$55.32
6	75	\$35.75	\$7.85	\$14.44	\$0.00	\$58.04
7	80	\$38.13	\$7.85	\$14.77	\$0.00	\$60.75
8	90	\$42.89	\$7.85	\$15.44	\$0.00	\$66.18

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.28	\$7.85	\$0.00	\$0.00	\$32.13
2	55	\$26.71	\$7.85	\$3.66	\$0.00	\$38.22
3	60	\$29.14	\$7.85	\$3.99	\$0.00	\$40.98
4	65	\$31.56	\$7.85	\$4.32	\$0.00	\$43.73
5	70	\$33.99	\$7.85	\$14.11	\$0.00	\$55.95
6	75	\$36.42	\$7.85	\$14.44	\$0.00	\$58.71
7	80	\$38.85	\$7.85	\$14.77	\$0.00	\$61.47
8	90	\$43.70	\$7.85	\$15.44	\$0.00	\$66.99

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

DEMO: ADZEMAN <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.75	\$7.30	\$12.95	\$0.00	\$55.00
	06/01/2015	\$35.50	\$7.30	\$12.95	\$0.00	\$55.75
	12/01/2015	\$36.25	\$7.30	\$12.95	\$0.00	\$56.50

For apprentice rates see "Apprentice- LABORER"

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DEMO: BACKHOE/LOADER/HAMMER OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2014	\$35.75	\$7.30	\$12.95	\$0.00	\$56.00
	06/01/2015	\$36.50	\$7.30	\$12.95	\$0.00	\$56.75
	12/01/2015	\$37.25	\$7.30	\$12.95	\$0.00	\$57.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: BURNERS <i>LABORERS - ZONE 1</i>	12/01/2014	\$35.50	\$7.30	\$12.95	\$0.00	\$55.75
	06/01/2015	\$36.25	\$7.30	\$12.95	\$0.00	\$56.50
	12/01/2015	\$37.00	\$7.30	\$12.95	\$0.00	\$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: CONCRETE CUTTER/SAWYER <i>LABORERS - ZONE 1</i>	12/01/2014	\$35.75	\$7.30	\$12.95	\$0.00	\$56.00
	06/01/2015	\$36.50	\$7.30	\$12.95	\$0.00	\$56.75
	12/01/2015	\$37.25	\$7.30	\$12.95	\$0.00	\$57.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: JACKHAMMER OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2014	\$35.50	\$7.30	\$12.95	\$0.00	\$55.75
	06/01/2015	\$36.25	\$7.30	\$12.95	\$0.00	\$56.50
	12/01/2015	\$37.00	\$7.30	\$12.95	\$0.00	\$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.75	\$7.30	\$12.95	\$0.00	\$55.00
	06/01/2015	\$35.50	\$7.30	\$12.95	\$0.00	\$55.75
	12/01/2015	\$36.25	\$7.30	\$12.95	\$0.00	\$56.50
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$58.24	\$9.80	\$18.17	\$0.00	\$86.21
	08/01/2015	\$60.34	\$9.80	\$18.17	\$0.00	\$88.31
DIVER TENDER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$41.60	\$9.80	\$18.17	\$0.00	\$69.57
	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07
DIVER TENDER (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$62.40	\$9.80	\$18.17	\$0.00	\$90.37
	08/01/2015	\$64.65	\$9.80	\$18.17	\$0.00	\$92.62
DIVER/SLURRY (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$87.36	\$9.80	\$18.17	\$0.00	\$115.33
	08/01/2015	\$90.51	\$9.80	\$18.17	\$0.00	\$118.48
DRAWBRIDGE OPERATOR (Construction) <i>ELECTRICIANS LOCAL 103</i>	09/01/2014	\$44.79	\$13.00	\$15.04	\$0.00	\$72.83
	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
	09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
	03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54
For apprentice rates see "Apprentice- ELECTRICIAN"						
ELECTRICIAN <i>ELECTRICIANS LOCAL 103</i>	09/01/2014	\$44.79	\$13.00	\$15.04	\$0.00	\$72.83
	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
	09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
	03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - *ELECTRICIAN - Local 103*

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.92	\$13.00	\$0.54	\$0.00	\$31.46
2	40	\$17.92	\$13.00	\$0.54	\$0.00	\$31.46
3	45	\$20.16	\$13.00	\$11.33	\$0.00	\$44.49
4	45	\$20.16	\$13.00	\$11.33	\$0.00	\$44.49
5	50	\$22.40	\$13.00	\$11.67	\$0.00	\$47.07
6	55	\$24.63	\$13.00	\$12.01	\$0.00	\$49.64
7	60	\$26.87	\$13.00	\$12.35	\$0.00	\$52.22
8	65	\$29.11	\$13.00	\$12.68	\$0.00	\$54.79
9	70	\$31.35	\$13.00	\$13.02	\$0.00	\$57.37
10	75	\$33.59	\$13.00	\$13.36	\$0.00	\$59.95

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$18.07	\$13.00	\$0.54	\$0.00	\$31.61
2	40	\$18.07	\$13.00	\$0.54	\$0.00	\$31.61
3	45	\$20.33	\$13.00	\$11.64	\$0.00	\$44.97
4	45	\$20.33	\$13.00	\$11.64	\$0.00	\$44.97
5	50	\$22.59	\$13.00	\$11.98	\$0.00	\$47.57
6	55	\$24.84	\$13.00	\$12.33	\$0.00	\$50.17
7	60	\$27.10	\$13.00	\$12.66	\$0.00	\$52.76
8	65	\$29.36	\$13.00	\$13.01	\$0.00	\$55.37
9	70	\$31.62	\$13.00	\$13.35	\$0.00	\$57.97
10	75	\$33.88	\$13.00	\$13.70	\$0.00	\$60.58

Notes:

App Prior 1/1/03; 30/35/40/45/50/55/65/70/75/80

Apprentice to Journeyworker Ratio:2:3***

ELEVATOR CONSTRUCTOR
ELEVATOR CONSTRUCTORS LOCAL 4

01/01/2012 \$52.45 \$8.78 \$6.96 \$0.00 \$68.19

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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Apprentice - ELEVATOR CONSTRUCTOR - Local 4

Effective Date - 01/01/2012

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.23	\$8.78	\$0.00	\$0.00	\$35.01
2	55	\$28.85	\$8.78	\$6.96	\$0.00	\$44.59
3	65	\$34.09	\$8.78	\$6.96	\$0.00	\$49.83
4	70	\$36.72	\$8.78	\$6.96	\$0.00	\$52.46
5	80	\$41.96	\$8.78	\$6.96	\$0.00	\$57.70

Notes:

Steps 1-2 are 6 mos.; Steps 3-5 are 1 year

Apprentice to Journeyworker Ratio:1:1

ELEVATOR CONSTRUCTOR HELPER ELEVATOR CONSTRUCTORS LOCAL 4	01/01/2012	\$38.59	\$8.78	\$6.96	\$0.00	\$54.33
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"						
FENCE & GUARD RAIL ERECTOR LABORERS - ZONE 1	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY OPERATING ENGINEERS LOCAL 4	11/01/2014	\$39.59	\$10.00	\$14.18	\$0.00	\$63.77
	05/01/2015	\$40.32	\$10.00	\$14.18	\$0.00	\$64.50
	11/01/2015	\$40.90	\$10.00	\$14.18	\$0.00	\$65.08
	05/01/2016	\$41.79	\$10.00	\$14.18	\$0.00	\$65.97
	11/01/2016	\$42.38	\$10.00	\$14.18	\$0.00	\$66.56
	05/01/2017	\$43.26	\$10.00	\$14.18	\$0.00	\$67.44
	11/01/2017	\$43.99	\$10.00	\$14.18	\$0.00	\$68.17
	05/01/2018	\$44.70	\$10.00	\$14.18	\$0.00	\$68.88
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY OPERATING ENGINEERS LOCAL 4	11/01/2014	\$41.02	\$10.00	\$14.18	\$0.00	\$65.20
	05/01/2015	\$41.75	\$10.00	\$14.18	\$0.00	\$65.93
	11/01/2015	\$42.34	\$10.00	\$14.18	\$0.00	\$66.52
	05/01/2016	\$43.23	\$10.00	\$14.18	\$0.00	\$67.41
	11/01/2016	\$43.83	\$10.00	\$14.18	\$0.00	\$68.01
	05/01/2017	\$44.72	\$10.00	\$14.18	\$0.00	\$68.90
	11/01/2017	\$45.45	\$10.00	\$14.18	\$0.00	\$69.63
	05/01/2018	\$46.17	\$10.00	\$14.18	\$0.00	\$70.35
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIELD ENG. ROD PERSON-BLDG, SITE, HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	11/01/2014	\$21.35	\$10.00	\$14.18	\$0.00	\$45.53
	05/01/2015	\$21.78	\$10.00	\$14.18	\$0.00	\$45.96
	11/01/2015	\$22.12	\$10.00	\$14.18	\$0.00	\$46.30
	05/01/2016	\$22.64	\$10.00	\$14.18	\$0.00	\$46.82
	11/01/2016	\$22.99	\$10.00	\$14.18	\$0.00	\$47.17
	05/01/2017	\$23.52	\$10.00	\$14.18	\$0.00	\$47.70
	11/01/2017	\$23.94	\$10.00	\$14.18	\$0.00	\$48.12
	05/01/2018	\$24.37	\$10.00	\$14.18	\$0.00	\$48.55
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIRE ALARM INSTALLER <i>ELECTRICIANS LOCAL 103</i>	09/01/2014	\$44.79	\$13.00	\$15.04	\$0.00	\$72.83
	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
	09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
	03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIRE ALARM REPAIR / MAINTENANCE / COMMISSIONING <i>ELECTRICIANS</i> <i>LOCAL 103</i>	09/01/2014	\$33.59	\$13.00	\$13.36	\$0.00	\$59.95
	03/01/2015	\$33.88	\$13.00	\$13.70	\$0.00	\$60.58
	09/01/2015	\$34.60	\$13.00	\$13.72	\$0.00	\$61.32
	03/01/2016	\$35.31	\$13.00	\$13.74	\$0.00	\$62.05
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"						
FIREMAN (ASST. ENGINEER) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$35.33	\$10.00	\$14.30	\$0.00	\$59.63
	06/01/2015	\$35.95	\$10.00	\$14.30	\$0.00	\$60.25
	12/01/2015	\$37.00	\$10.00	\$14.30	\$0.00	\$61.30
	06/01/2016	\$37.62	\$10.00	\$14.30	\$0.00	\$61.92
	12/01/2016	\$38.66	\$10.00	\$14.30	\$0.00	\$62.96
	06/01/2017	\$39.50	\$10.00	\$14.30	\$0.00	\$63.80
	12/01/2017	\$40.33	\$10.00	\$14.30	\$0.00	\$64.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FLAGGER & SIGNALER <i>LABORERS - ZONE I</i>	12/01/2014	\$20.50	\$7.30	\$12.95	\$0.00	\$40.75
	06/01/2015	\$20.50	\$7.30	\$12.95	\$0.00	\$40.75
	12/01/2015	\$20.50	\$7.30	\$12.95	\$0.00	\$40.75
	06/01/2016	\$20.50	\$7.30	\$12.95	\$0.00	\$40.75
	12/01/2016	\$20.50	\$7.30	\$12.95	\$0.00	\$40.75
For apprentice rates see "Apprentice- LABORER"						
FLOORCOVERER <i>FLOORCOVERERS LOCAL 2168 ZONE I</i>	09/01/2014	\$40.40	\$9.80	\$17.21	\$0.00	\$67.41

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - FLOORCOVERER - Local 2168 Zone I

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.20	\$9.80	\$1.79	\$0.00	\$31.79
2	55	\$22.22	\$9.80	\$1.79	\$0.00	\$33.81
3	60	\$24.24	\$9.80	\$11.84	\$0.00	\$45.88
4	65	\$26.26	\$9.80	\$11.84	\$0.00	\$47.90
5	70	\$28.28	\$9.80	\$13.63	\$0.00	\$51.71
6	75	\$30.30	\$9.80	\$13.63	\$0.00	\$53.73
7	80	\$32.32	\$9.80	\$15.42	\$0.00	\$57.54
8	85	\$34.34	\$9.80	\$15.42	\$0.00	\$59.56

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

FORK LIFT/CHERRY PICKER
OPERATING ENGINEERS LOCAL 4

12/01/2014	\$42.39	\$10.00	\$14.30	\$0.00	\$66.69
06/01/2015	\$43.14	\$10.00	\$14.30	\$0.00	\$67.44
12/01/2015	\$44.39	\$10.00	\$14.30	\$0.00	\$68.69
06/01/2016	\$45.14	\$10.00	\$14.30	\$0.00	\$69.44
12/01/2016	\$46.39	\$10.00	\$14.30	\$0.00	\$70.69
06/01/2017	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
12/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GENERATOR/LIGHTING PLANT/HEATERS
OPERATING ENGINEERS LOCAL 4

12/01/2014	\$29.40	\$10.00	\$14.30	\$0.00	\$53.70
06/01/2015	\$29.92	\$10.00	\$14.30	\$0.00	\$54.22
12/01/2015	\$30.79	\$10.00	\$14.30	\$0.00	\$55.09
06/01/2016	\$31.31	\$10.00	\$14.30	\$0.00	\$55.61
12/01/2016	\$32.18	\$10.00	\$14.30	\$0.00	\$56.48
06/01/2017	\$32.87	\$10.00	\$14.30	\$0.00	\$57.17
12/01/2017	\$33.56	\$10.00	\$14.30	\$0.00	\$57.86

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR
SYSTEMS)
GLAZIERS LOCAL 35 (ZONE 2)

01/01/2015	\$37.16	\$7.85	\$16.10	\$0.00	\$61.11
07/01/2015	\$38.06	\$7.85	\$16.10	\$0.00	\$62.01
01/01/2016	\$39.01	\$7.85	\$16.10	\$0.00	\$62.96
07/01/2016	\$39.96	\$7.85	\$16.10	\$0.00	\$63.91
01/01/2017	\$40.91	\$7.85	\$16.10	\$0.00	\$64.86

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - GLAZIER - Local 35 Zone 2

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.58	\$7.85	\$0.00	\$0.00	\$26.43
2	55	\$20.44	\$7.85	\$3.66	\$0.00	\$31.95
3	60	\$22.30	\$7.85	\$3.99	\$0.00	\$34.14
4	65	\$24.15	\$7.85	\$4.32	\$0.00	\$36.32
5	70	\$26.01	\$7.85	\$14.11	\$0.00	\$47.97
6	75	\$27.87	\$7.85	\$14.44	\$0.00	\$50.16
7	80	\$29.73	\$7.85	\$14.77	\$0.00	\$52.35
8	90	\$33.44	\$7.85	\$15.44	\$0.00	\$56.73

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.03	\$7.85	\$0.00	\$0.00	\$26.88
2	55	\$20.93	\$7.85	\$3.66	\$0.00	\$32.44
3	60	\$22.84	\$7.85	\$3.99	\$0.00	\$34.68
4	65	\$24.74	\$7.85	\$4.32	\$0.00	\$36.91
5	70	\$26.64	\$7.85	\$14.11	\$0.00	\$48.60
6	75	\$28.55	\$7.85	\$14.44	\$0.00	\$50.84
7	80	\$30.45	\$7.85	\$14.77	\$0.00	\$53.07
8	90	\$34.25	\$7.85	\$15.44	\$0.00	\$57.54

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

HOISTING ENGINEER/CRANES/GRADALLS	12/01/2014	\$42.39	\$10.00	\$14.30	\$0.00	\$66.69
OPERATING ENGINEERS LOCAL 4	06/01/2015	\$43.14	\$10.00	\$14.30	\$0.00	\$67.44
	12/01/2015	\$44.39	\$10.00	\$14.30	\$0.00	\$68.69
	06/01/2016	\$45.14	\$10.00	\$14.30	\$0.00	\$69.44
	12/01/2016	\$46.39	\$10.00	\$14.30	\$0.00	\$70.69
	06/01/2017	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	12/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - OPERATING ENGINEERS - Local 4

Effective Date - 12/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$23.31	\$10.00	\$0.00	\$0.00	\$33.31
2	60	\$25.43	\$10.00	\$14.30	\$0.00	\$49.73
3	65	\$27.55	\$10.00	\$14.30	\$0.00	\$51.85
4	70	\$29.67	\$10.00	\$14.30	\$0.00	\$53.97
5	75	\$31.79	\$10.00	\$14.30	\$0.00	\$56.09
6	80	\$33.91	\$10.00	\$14.30	\$0.00	\$58.21
7	85	\$36.03	\$10.00	\$14.30	\$0.00	\$60.33
8	90	\$38.15	\$10.00	\$14.30	\$0.00	\$62.45

Effective Date - 06/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$23.73	\$10.00	\$0.00	\$0.00	\$33.73
2	60	\$25.88	\$10.00	\$14.30	\$0.00	\$50.18
3	65	\$28.04	\$10.00	\$14.30	\$0.00	\$52.34
4	70	\$30.20	\$10.00	\$14.30	\$0.00	\$54.50
5	75	\$32.36	\$10.00	\$14.30	\$0.00	\$56.66
6	80	\$34.51	\$10.00	\$14.30	\$0.00	\$58.81
7	85	\$36.67	\$10.00	\$14.30	\$0.00	\$60.97
8	90	\$38.83	\$10.00	\$14.30	\$0.00	\$63.13

Notes:

Apprentice to Journeyworker Ratio:1:6

HVAC (DUCTWORK)

SHEETMETAL WORKERS LOCAL 17 - A

02/01/2015	\$43.69	\$9.82	\$20.54	\$2.19	\$76.24
08/01/2015	\$44.69	\$9.82	\$20.54	\$2.19	\$77.24
02/01/2016	\$45.69	\$9.82	\$20.54	\$2.19	\$78.24
08/01/2016	\$46.84	\$9.82	\$20.54	\$2.19	\$79.39
02/01/2017	\$47.94	\$9.82	\$20.54	\$2.19	\$80.49
08/01/2017	\$49.04	\$9.82	\$20.54	\$2.19	\$81.59
02/01/2018	\$50.19	\$9.82	\$20.54	\$2.19	\$82.74

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (ELECTRICAL CONTROLS)

ELECTRICIANS LOCAL 103

09/01/2014	\$44.79	\$13.00	\$15.04	\$0.00	\$72.83
03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54

For apprentice rates see "Apprentice- ELECTRICIAN"

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING - AIR) <i>SHEETMETAL WORKERS LOCAL 17 - A</i>	02/01/2015	\$43.69	\$9.82	\$20.54	\$2.19	\$76.24
	08/01/2015	\$44.69	\$9.82	\$20.54	\$2.19	\$77.24
	02/01/2016	\$45.69	\$9.82	\$20.54	\$2.19	\$78.24
	08/01/2016	\$46.84	\$9.82	\$20.54	\$2.19	\$79.39
	02/01/2017	\$47.94	\$9.82	\$20.54	\$2.19	\$80.49
	08/01/2017	\$49.04	\$9.82	\$20.54	\$2.19	\$81.59
	02/01/2018	\$50.19	\$9.82	\$20.54	\$2.19	\$82.74
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (TESTING AND BALANCING -WATER) <i>PIPEFITTERS LOCAL 537</i>	09/01/2014	\$48.69	\$9.20	\$16.64	\$0.00	\$74.53
	03/01/2015	\$49.69	\$9.20	\$16.64	\$0.00	\$75.53
	09/01/2015	\$50.69	\$9.20	\$16.64	\$0.00	\$76.53
	03/01/2016	\$51.69	\$9.20	\$16.64	\$0.00	\$77.53
	09/01/2016	\$52.69	\$9.20	\$16.64	\$0.00	\$78.53
	03/01/2017	\$53.69	\$9.20	\$16.64	\$0.00	\$79.53
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HVAC MECHANIC <i>PIPEFITTERS LOCAL 537</i>	09/01/2014	\$48.69	\$9.20	\$16.64	\$0.00	\$74.53
	03/01/2015	\$49.69	\$9.20	\$16.64	\$0.00	\$75.53
	09/01/2015	\$50.69	\$9.20	\$16.64	\$0.00	\$76.53
	03/01/2016	\$51.69	\$9.20	\$16.64	\$0.00	\$77.53
	09/01/2016	\$52.69	\$9.20	\$16.64	\$0.00	\$78.53
	03/01/2017	\$53.69	\$9.20	\$16.64	\$0.00	\$79.53
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS <i>LABORERS - ZONE 1</i>	12/01/2014	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	06/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	12/01/2015	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	06/01/2016	\$37.60	\$7.30	\$12.95	\$0.00	\$57.85
	12/01/2016	\$38.60	\$7.30	\$12.95	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
INSULATOR (PIPES & TANKS) <i>HEAT & FROST INSULATORS LOCAL 6 (BOSTON)</i>	09/01/2014	\$43.31	\$11.25	\$12.60	\$0.00	\$67.16

Apprentice - ASBESTOS INSULATOR (Pipes & Tanks) - Local 6 Boston

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.66	\$11.25	\$9.35	\$0.00	\$42.26
2	60	\$25.99	\$11.25	\$10.00	\$0.00	\$47.24
3	70	\$30.32	\$11.25	\$10.65	\$0.00	\$52.22
4	80	\$34.65	\$11.25	\$11.30	\$0.00	\$57.20

Notes:

Steps are 1 year

Apprentice to Journeyworker Ratio: 1:4

IRONWORKER/WELDER <i>IRONWORKERS LOCAL 7 (BOSTON AREA)</i>	03/16/2014	\$41.19	\$7.70	\$19.25	\$0.00	\$68.14
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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total RateApprentice - *IRONWORKER - Local 7 Boston*

Effective Date - 03/16/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$24.71	\$7.70	\$19.25	\$0.00	\$51.66
2	70	\$28.83	\$7.70	\$19.25	\$0.00	\$55.78
3	75	\$30.89	\$7.70	\$19.25	\$0.00	\$57.84
4	80	\$32.95	\$7.70	\$19.25	\$0.00	\$59.90
5	85	\$35.01	\$7.70	\$19.25	\$0.00	\$61.96
6	90	\$37.07	\$7.70	\$19.25	\$0.00	\$64.02

Notes:

** Structural 1:6; Ornamental 1:4

Apprentice to Journeyworker Ratio:**

JACKHAMMER & PAVING BREAKER OPERATOR
LABORERS - ZONE 1

12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

LABORER
LABORERS - ZONE 1

12/01/2014	\$34.60	\$7.30	\$12.95	\$0.00	\$54.85
06/01/2015	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
12/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
06/01/2016	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
12/01/2016	\$37.85	\$7.30	\$12.95	\$0.00	\$58.10

Apprentice - *LABORER - Zone 1*

Effective Date - 12/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$20.76	\$7.30	\$12.95	\$0.00	\$41.01
2	70	\$24.22	\$7.30	\$12.95	\$0.00	\$44.47
3	80	\$27.68	\$7.30	\$12.95	\$0.00	\$47.93
4	90	\$31.14	\$7.30	\$12.95	\$0.00	\$51.39

Effective Date - 06/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$21.21	\$7.30	\$12.95	\$0.00	\$41.46
2	70	\$24.75	\$7.30	\$12.95	\$0.00	\$45.00
3	80	\$28.28	\$7.30	\$12.95	\$0.00	\$48.53
4	90	\$31.82	\$7.30	\$12.95	\$0.00	\$52.07

Notes:

Apprentice to Journeyworker Ratio:1:5

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LABORER: CARPENTER TENDER	12/01/2014	\$34.60	\$7.30	\$12.95	\$0.00	\$54.85
LABORERS - ZONE 1	06/01/2015	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	12/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	06/01/2016	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	12/01/2016	\$37.85	\$7.30	\$12.95	\$0.00	\$58.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: CEMENT FINISHER TENDER	12/01/2014	\$34.60	\$7.30	\$12.95	\$0.00	\$54.85
LABORERS - ZONE 1	06/01/2015	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	12/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	06/01/2016	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	12/01/2016	\$37.85	\$7.30	\$12.95	\$0.00	\$58.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER	12/01/2014	\$34.75	\$7.30	\$12.95	\$0.00	\$55.00
LABORERS - ZONE 1	06/01/2015	\$35.50	\$7.30	\$12.95	\$0.00	\$55.75
	12/01/2015	\$36.25	\$7.30	\$12.95	\$0.00	\$56.50
For apprentice rates see "Apprentice- LABORER"						
LABORER: MASON TENDER	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
LABORERS - ZONE 1	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
LABORER: MULTI-TRADE TENDER	12/01/2014	\$34.60	\$7.30	\$12.95	\$0.00	\$54.85
LABORERS - ZONE 1	06/01/2015	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	12/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	06/01/2016	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	12/01/2016	\$37.85	\$7.30	\$12.95	\$0.00	\$58.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: TREE REMOVER	12/01/2014	\$34.60	\$7.30	\$12.95	\$0.00	\$54.85
LABORERS - ZONE 1	06/01/2015	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	12/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	06/01/2016	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	12/01/2016	\$37.85	\$7.30	\$12.95	\$0.00	\$58.10
This classification applies to all tree work associated with the removal of standing trees, and trimming and removal of branches and limbs when the work is not done for a utility company for the purpose of operation, maintenance or repair of utility company equipment. For apprentice rates see "Apprentice- LABORER"						
LASER BEAM OPERATOR	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
LABORERS - ZONE 1	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
MARBLE & TILE FINISHERS	02/01/2015	\$37.37	\$10.18	\$17.18	\$0.00	\$64.73
BRICKLAYERS LOCAL 3 - MARBLE & TILE	08/01/2015	\$38.08	\$10.18	\$17.25	\$0.00	\$65.51
	02/01/2016	\$38.53	\$10.18	\$17.25	\$0.00	\$65.96
	08/01/2016	\$39.23	\$10.18	\$17.33	\$0.00	\$66.74
	02/01/2017	\$39.69	\$10.18	\$17.33	\$0.00	\$67.20

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - MARBLE & TILE FINISHER - Local 3 Marble & Tile

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.69	\$10.18	\$17.18	\$0.00	\$46.05
2	60	\$22.42	\$10.18	\$17.18	\$0.00	\$49.78
3	70	\$26.16	\$10.18	\$17.18	\$0.00	\$53.52
4	80	\$29.90	\$10.18	\$17.18	\$0.00	\$57.26
5	90	\$33.63	\$10.18	\$17.18	\$0.00	\$60.99

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.04	\$10.18	\$17.25	\$0.00	\$46.47
2	60	\$22.85	\$10.18	\$17.25	\$0.00	\$50.28
3	70	\$26.66	\$10.18	\$17.25	\$0.00	\$54.09
4	80	\$30.46	\$10.18	\$17.25	\$0.00	\$57.89
5	90	\$34.27	\$10.18	\$17.25	\$0.00	\$61.70

Notes:

Apprentice to Journeyworker Ratio:1:3

MARBLE MASONS, TILELAYERS & TERRAZZO MECH
BRICKLAYERS LOCAL 3 - MARBLE & TILE

02/01/2015	\$49.00	\$10.18	\$18.50	\$0.00	\$77.68
08/01/2015	\$49.90	\$10.18	\$18.57	\$0.00	\$78.65
02/01/2016	\$50.47	\$10.18	\$18.57	\$0.00	\$79.22
08/01/2016	\$51.37	\$10.18	\$18.65	\$0.00	\$80.20
02/01/2017	\$51.94	\$10.18	\$18.65	\$0.00	\$80.77

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - MARBLE-TILE-TERRAZZO MECHANIC - Local 3 Marble & Tile

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.50	\$10.18	\$18.50	\$0.00	\$53.18
2	60	\$29.40	\$10.18	\$18.50	\$0.00	\$58.08
3	70	\$34.30	\$10.18	\$18.50	\$0.00	\$62.98
4	80	\$39.20	\$10.18	\$18.50	\$0.00	\$67.88
5	90	\$44.10	\$10.18	\$18.50	\$0.00	\$72.78

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.95	\$10.18	\$18.57	\$0.00	\$53.70
2	60	\$29.94	\$10.18	\$18.57	\$0.00	\$58.69
3	70	\$34.93	\$10.18	\$18.57	\$0.00	\$63.68
4	80	\$39.92	\$10.18	\$18.57	\$0.00	\$68.67
5	90	\$44.91	\$10.18	\$18.57	\$0.00	\$73.66

Notes:

Apprentice to Journeyworker Ratio:1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES)	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
OPERATING ENGINEERS LOCAL 4	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
MECHANICS MAINTENANCE	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
OPERATING ENGINEERS LOCAL 4	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
MILLWRIGHT (Zone 1)	10/01/2014	\$36.68	\$9.80	\$16.21	\$0.00	\$62.69
MILLWRIGHTS LOCAL 1121 - Zone 1	04/01/2015	\$37.64	\$9.80	\$16.21	\$0.00	\$63.65

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - MILLWRIGHT - Local 1121 Zone 1

Effective Date - 10/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$20.17	\$9.80	\$4.48	\$0.00	\$34.45
2	65	\$23.84	\$9.80	\$13.36	\$0.00	\$47.00
3	75	\$27.51	\$9.80	\$14.18	\$0.00	\$51.49
4	85	\$31.18	\$9.80	\$14.99	\$0.00	\$55.97

Effective Date - 04/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$20.70	\$9.80	\$4.48	\$0.00	\$34.98
2	65	\$24.47	\$9.80	\$13.36	\$0.00	\$47.63
3	75	\$28.23	\$9.80	\$14.18	\$0.00	\$52.21
4	85	\$31.99	\$9.80	\$14.99	\$0.00	\$56.78

Notes:

Steps are 2,000 hours

Apprentice to Journeyworker Ratio:1:5

MORTAR MIXER	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
LABORERS - ZONE 1	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
OILER (OTHER THAN TRUCK CRANES, GRADALLS)	12/01/2014	\$21.90	\$10.00	\$14.30	\$0.00	\$46.20
OPERATING ENGINEERS LOCAL 4	06/01/2015	\$22.28	\$10.00	\$14.30	\$0.00	\$46.58
	12/01/2015	\$22.93	\$10.00	\$14.30	\$0.00	\$47.23
	06/01/2016	\$23.32	\$10.00	\$14.30	\$0.00	\$47.62
	12/01/2016	\$23.97	\$10.00	\$14.30	\$0.00	\$48.27
	06/01/2017	\$24.48	\$10.00	\$14.30	\$0.00	\$48.78
	12/01/2017	\$25.00	\$10.00	\$14.30	\$0.00	\$49.30
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
OILER (TRUCK CRANES, GRADALLS)	12/01/2014	\$25.54	\$10.00	\$14.30	\$0.00	\$49.84
OPERATING ENGINEERS LOCAL 4	06/01/2015	\$25.99	\$10.00	\$14.30	\$0.00	\$50.29
	12/01/2015	\$26.74	\$10.00	\$14.30	\$0.00	\$51.04
	06/01/2016	\$27.20	\$10.00	\$14.30	\$0.00	\$51.50
	12/01/2016	\$27.95	\$10.00	\$14.30	\$0.00	\$52.25
	06/01/2017	\$28.55	\$10.00	\$14.30	\$0.00	\$52.85
	12/01/2017	\$29.16	\$10.00	\$14.30	\$0.00	\$53.46
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
OTHER POWER DRIVEN EQUIPMENT - CLASS II <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PAINTER (BRIDGES/TANKS) <i>PAINTERS LOCAL 35 - ZONE 2</i>	01/01/2015	\$47.66	\$7.85	\$16.10	\$0.00	\$71.61
	07/01/2015	\$48.56	\$7.85	\$16.10	\$0.00	\$72.51
	01/01/2016	\$49.51	\$7.85	\$16.10	\$0.00	\$73.46
	07/01/2016	\$50.46	\$7.85	\$16.10	\$0.00	\$74.41
	01/01/2017	\$51.41	\$7.85	\$16.10	\$0.00	\$75.36

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.83	\$7.85	\$0.00	\$0.00	\$31.68
2	55	\$26.21	\$7.85	\$3.66	\$0.00	\$37.72
3	60	\$28.60	\$7.85	\$3.99	\$0.00	\$40.44
4	65	\$30.98	\$7.85	\$4.32	\$0.00	\$43.15
5	70	\$33.36	\$7.85	\$14.11	\$0.00	\$55.32
6	75	\$35.75	\$7.85	\$14.44	\$0.00	\$58.04
7	80	\$38.13	\$7.85	\$14.77	\$0.00	\$60.75
8	90	\$42.89	\$7.85	\$15.44	\$0.00	\$66.18

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.28	\$7.85	\$0.00	\$0.00	\$32.13
2	55	\$26.71	\$7.85	\$3.66	\$0.00	\$38.22
3	60	\$29.14	\$7.85	\$3.99	\$0.00	\$40.98
4	65	\$31.56	\$7.85	\$4.32	\$0.00	\$43.73
5	70	\$33.99	\$7.85	\$14.11	\$0.00	\$55.95
6	75	\$36.42	\$7.85	\$14.44	\$0.00	\$58.71
7	80	\$38.85	\$7.85	\$14.77	\$0.00	\$61.47
8	90	\$43.70	\$7.85	\$15.44	\$0.00	\$66.99

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	01/01/2015	\$38.56	\$7.85	\$16.10	\$0.00	\$62.51
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. <i>PAINTERS LOCAL 35 - ZONE 2</i>	07/01/2015	\$39.46	\$7.85	\$16.10	\$0.00	\$63.41
	01/01/2016	\$40.41	\$7.85	\$16.10	\$0.00	\$64.36
	07/01/2016	\$41.36	\$7.85	\$16.10	\$0.00	\$65.31
	01/01/2017	\$42.31	\$7.85	\$16.10	\$0.00	\$66.26

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 2 - Spray/Sandblast - New

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.28	\$7.85	\$0.00	\$0.00	\$27.13
2	55	\$21.21	\$7.85	\$3.66	\$0.00	\$32.72
3	60	\$23.14	\$7.85	\$3.99	\$0.00	\$34.98
4	65	\$25.06	\$7.85	\$4.32	\$0.00	\$37.23
5	70	\$26.99	\$7.85	\$14.11	\$0.00	\$48.95
6	75	\$28.92	\$7.85	\$14.44	\$0.00	\$51.21
7	80	\$30.85	\$7.85	\$14.77	\$0.00	\$53.47
8	90	\$34.70	\$7.85	\$15.44	\$0.00	\$57.99

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.73	\$7.85	\$0.00	\$0.00	\$27.58
2	55	\$21.70	\$7.85	\$3.66	\$0.00	\$33.21
3	60	\$23.68	\$7.85	\$3.99	\$0.00	\$35.52
4	65	\$25.65	\$7.85	\$4.32	\$0.00	\$37.82
5	70	\$27.62	\$7.85	\$14.11	\$0.00	\$49.58
6	75	\$29.60	\$7.85	\$14.44	\$0.00	\$51.89
7	80	\$31.57	\$7.85	\$14.77	\$0.00	\$54.19
8	90	\$35.51	\$7.85	\$15.44	\$0.00	\$58.80

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT)	01/01/2015	\$36.62	\$7.85	\$16.10	\$0.00	\$60.57
PAINTERS LOCAL 35 - ZONE 2	07/01/2015	\$37.52	\$7.85	\$16.10	\$0.00	\$61.47
	01/01/2016	\$38.47	\$7.85	\$16.10	\$0.00	\$62.42
	07/01/2016	\$39.42	\$7.85	\$16.10	\$0.00	\$63.37
	01/01/2017	\$40.37	\$7.85	\$16.10	\$0.00	\$64.32

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 2 - Spray/Sandblast - Repaint

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.31	\$7.85	\$0.00	\$0.00	\$26.16
2	55	\$20.14	\$7.85	\$3.66	\$0.00	\$31.65
3	60	\$21.97	\$7.85	\$3.99	\$0.00	\$33.81
4	65	\$23.80	\$7.85	\$4.32	\$0.00	\$35.97
5	70	\$25.63	\$7.85	\$14.11	\$0.00	\$47.59
6	75	\$27.47	\$7.85	\$14.44	\$0.00	\$49.76
7	80	\$29.30	\$7.85	\$14.77	\$0.00	\$51.92
8	90	\$32.96	\$7.85	\$15.44	\$0.00	\$56.25

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.76	\$7.85	\$0.00	\$0.00	\$26.61
2	55	\$20.64	\$7.85	\$3.66	\$0.00	\$32.15
3	60	\$22.51	\$7.85	\$3.99	\$0.00	\$34.35
4	65	\$24.39	\$7.85	\$4.32	\$0.00	\$36.56
5	70	\$26.26	\$7.85	\$14.11	\$0.00	\$48.22
6	75	\$28.14	\$7.85	\$14.44	\$0.00	\$50.43
7	80	\$30.02	\$7.85	\$14.77	\$0.00	\$52.64
8	90	\$33.77	\$7.85	\$15.44	\$0.00	\$57.06

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (TRAFFIC MARKINGS)	12/01/2014	\$34.60	\$7.30	\$12.95	\$0.00	\$54.85
LABORERS - ZONE 1	06/01/2015	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	12/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	06/01/2016	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	12/01/2016	\$37.85	\$7.30	\$12.95	\$0.00	\$58.10
For Apprentice rates see "Apprentice- LABORER"						
PAINTER / TAPER (BRUSH, NEW) *	01/01/2015	\$37.16	\$7.85	\$16.10	\$0.00	\$61.11
* If 30% or more of surfaces to be painted are new construction,	07/01/2015	\$38.06	\$7.85	\$16.10	\$0.00	\$62.01
NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 2	01/01/2016	\$39.01	\$7.85	\$16.10	\$0.00	\$62.96
	07/01/2016	\$39.96	\$7.85	\$16.10	\$0.00	\$63.91
	01/01/2017	\$40.91	\$7.85	\$16.10	\$0.00	\$64.86

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - PAINTER - Local 35 Zone 2 - BRUSH NEW

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.58	\$7.85	\$0.00	\$0.00	\$26.43
2	55	\$20.44	\$7.85	\$3.66	\$0.00	\$31.95
3	60	\$22.30	\$7.85	\$3.99	\$0.00	\$34.14
4	65	\$24.15	\$7.85	\$4.32	\$0.00	\$36.32
5	70	\$26.01	\$7.85	\$14.11	\$0.00	\$47.97
6	75	\$27.87	\$7.85	\$14.44	\$0.00	\$50.16
7	80	\$29.73	\$7.85	\$14.77	\$0.00	\$52.35
8	90	\$33.44	\$7.85	\$15.44	\$0.00	\$56.73

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.03	\$7.85	\$0.00	\$0.00	\$26.88
2	55	\$20.93	\$7.85	\$3.66	\$0.00	\$32.44
3	60	\$22.84	\$7.85	\$3.99	\$0.00	\$34.68
4	65	\$24.74	\$7.85	\$4.32	\$0.00	\$36.91
5	70	\$26.64	\$7.85	\$14.11	\$0.00	\$48.60
6	75	\$28.55	\$7.85	\$14.44	\$0.00	\$50.84
7	80	\$30.45	\$7.85	\$14.77	\$0.00	\$53.07
8	90	\$34.25	\$7.85	\$15.44	\$0.00	\$57.54

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER / TAPER (BRUSH, REPAINT)	01/01/2015	\$35.22	\$7.85	\$16.10	\$0.00	\$59.17
PAINTERS LOCAL 35 - ZONE 2	07/01/2015	\$36.12	\$7.85	\$16.10	\$0.00	\$60.07
	01/01/2016	\$37.07	\$7.85	\$16.10	\$0.00	\$61.02
	07/01/2016	\$38.02	\$7.85	\$16.10	\$0.00	\$61.97
	01/01/2017	\$38.97	\$7.85	\$16.10	\$0.00	\$62.92

Issue Date: 02/24/2015

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 2 - BRUSH REPAINT

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$17.61	\$7.85	\$0.00	\$0.00	\$25.46
2	55	\$19.37	\$7.85	\$3.66	\$0.00	\$30.88
3	60	\$21.13	\$7.85	\$3.99	\$0.00	\$32.97
4	65	\$22.89	\$7.85	\$4.32	\$0.00	\$35.06
5	70	\$24.65	\$7.85	\$14.11	\$0.00	\$46.61
6	75	\$26.42	\$7.85	\$14.44	\$0.00	\$48.71
7	80	\$28.18	\$7.85	\$14.77	\$0.00	\$50.80
8	90	\$31.70	\$7.85	\$15.44	\$0.00	\$54.99

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.06	\$7.85	\$0.00	\$0.00	\$25.91
2	55	\$19.87	\$7.85	\$3.66	\$0.00	\$31.38
3	60	\$21.67	\$7.85	\$3.99	\$0.00	\$33.51
4	65	\$23.48	\$7.85	\$4.32	\$0.00	\$35.65
5	70	\$25.28	\$7.85	\$14.11	\$0.00	\$47.24
6	75	\$27.09	\$7.85	\$14.44	\$0.00	\$49.38
7	80	\$28.90	\$7.85	\$14.77	\$0.00	\$51.52
8	90	\$32.51	\$7.85	\$15.44	\$0.00	\$55.80

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PANEL & PICKUP TRUCKS DRIVER	12/01/2014	\$32.23	\$9.91	\$9.33	\$0.00	\$51.47
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	06/01/2015	\$32.58	\$9.91	\$9.33	\$0.00	\$51.82
	08/01/2015	\$32.58	\$10.41	\$9.33	\$0.00	\$52.32
	12/01/2015	\$32.58	\$10.41	\$10.08	\$0.00	\$53.07
	06/01/2016	\$33.08	\$10.41	\$10.08	\$0.00	\$53.57
	08/01/2016	\$33.08	\$10.91	\$10.08	\$0.00	\$54.07
	12/01/2016	\$33.08	\$10.91	\$10.89	\$0.00	\$54.88
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK)	08/01/2014	\$41.60	\$9.80	\$18.17	\$0.00	\$69.57
PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07
PILE DRIVER	08/01/2014	\$41.60	\$9.80	\$18.17	\$0.00	\$69.57
PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07

Issue Date: 02/24/2015

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - PILE DRIVER - Local 56 Zone 1

Effective Date - 08/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.80	\$9.80	\$18.17	\$0.00	\$48.77
2	60	\$24.96	\$9.80	\$18.17	\$0.00	\$52.93
3	70	\$29.12	\$9.80	\$18.17	\$0.00	\$57.09
4	75	\$31.20	\$9.80	\$18.17	\$0.00	\$59.17
5	80	\$33.28	\$9.80	\$18.17	\$0.00	\$61.25
6	80	\$33.28	\$9.80	\$18.17	\$0.00	\$61.25
7	90	\$37.44	\$9.80	\$18.17	\$0.00	\$65.41
8	90	\$37.44	\$9.80	\$18.17	\$0.00	\$65.41

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.55	\$9.80	\$18.17	\$0.00	\$49.52
2	60	\$25.86	\$9.80	\$18.17	\$0.00	\$53.83
3	70	\$30.17	\$9.80	\$18.17	\$0.00	\$58.14
4	75	\$32.33	\$9.80	\$18.17	\$0.00	\$60.30
5	80	\$34.48	\$9.80	\$18.17	\$0.00	\$62.45
6	80	\$34.48	\$9.80	\$18.17	\$0.00	\$62.45
7	90	\$38.79	\$9.80	\$18.17	\$0.00	\$66.76
8	90	\$38.79	\$9.80	\$18.17	\$0.00	\$66.76

Notes:

Apprentice to Journeyworker Ratio:1:3

PIPEFITTER & STEAMFITTER	09/01/2014	\$48.69	\$9.20	\$16.64	\$0.00	\$74.53
PIPEFITTERS LOCAL 537	03/01/2015	\$49.69	\$9.20	\$16.64	\$0.00	\$75.53
	09/01/2015	\$50.69	\$9.20	\$16.64	\$0.00	\$76.53
	03/01/2016	\$51.69	\$9.20	\$16.64	\$0.00	\$77.53
	09/01/2016	\$52.69	\$9.20	\$16.64	\$0.00	\$78.53
	03/01/2017	\$53.69	\$9.20	\$16.64	\$0.00	\$79.53

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Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PIPEFITTER - Local 537

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$19.48	\$9.20	\$7.50	\$0.00	\$36.18
2	45	\$21.91	\$9.20	\$16.64	\$0.00	\$47.75
3	60	\$29.21	\$9.20	\$16.64	\$0.00	\$55.05
4	70	\$34.08	\$9.20	\$16.64	\$0.00	\$59.92
5	80	\$38.95	\$9.20	\$16.64	\$0.00	\$64.79

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$19.88	\$9.20	\$7.50	\$0.00	\$36.58
2	45	\$22.36	\$9.20	\$16.64	\$0.00	\$48.20
3	60	\$29.81	\$9.20	\$16.64	\$0.00	\$55.65
4	70	\$34.78	\$9.20	\$16.64	\$0.00	\$60.62
5	80	\$39.75	\$9.20	\$16.64	\$0.00	\$65.59

Notes:

** 1:3; 3:15; 1:10 thereafter / Steps are 1 yr.
Refrig/AC Mechanic **1:1;1:2;2:4;3:6;4:8;5:10;6:12;7:14;8:17;9:20;10:23(Max)

Apprentice to Journeyworker Ratio:**

PIPELAYER	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
LABORERS - ZONE 1	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
PLUMBERS & GASFITTERS	09/01/2014	\$49.66	\$10.32	\$14.54	\$0.00	\$74.52
PLUMBERS & GASFITTERS LOCAL 12	03/01/2015	\$50.66	\$10.32	\$14.54	\$0.00	\$75.52
	09/01/2015	\$51.66	\$10.32	\$14.54	\$0.00	\$76.52
	03/01/2016	\$52.81	\$10.32	\$14.54	\$0.00	\$77.67
	09/01/2016	\$53.86	\$10.32	\$14.54	\$0.00	\$78.72
	03/01/2017	\$54.86	\$10.32	\$14.54	\$0.00	\$79.72

Issuc Date: 02/24/2015

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - PLUMBER/GASFITTER - Local 12

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$17.38	\$10.32	\$5.42	\$0.00	\$33.12
2	40	\$19.86	\$10.32	\$6.13	\$0.00	\$36.31
3	55	\$27.31	\$10.32	\$8.23	\$0.00	\$45.86
4	65	\$32.28	\$10.32	\$9.64	\$0.00	\$52.24
5	75	\$37.25	\$10.32	\$11.04	\$0.00	\$58.61

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$17.73	\$10.32	\$5.42	\$0.00	\$33.47
2	40	\$20.26	\$10.32	\$6.11	\$0.00	\$36.69
3	55	\$27.86	\$10.32	\$8.22	\$0.00	\$46.40
4	65	\$32.93	\$10.32	\$9.62	\$0.00	\$52.87
5	75	\$38.00	\$10.32	\$11.03	\$0.00	\$59.35

Notes:

** 1:2; 2:6; 3:10; 4:14; 5:19/Steps are 1 yr
Step4 with lic\$55.42 Step5 with lic\$61.79

Apprentice to Journeyworker Ratio:**

PNEUMATIC CONTROLS (TEMP.)	09/01/2014	\$48.69	\$9.20	\$16.64	\$0.00	\$74.53
PIPEFITTERS LOCAL 537	03/01/2015	\$49.69	\$9.20	\$16.64	\$0.00	\$75.53
	09/01/2015	\$50.69	\$9.20	\$16.64	\$0.00	\$76.53
	03/01/2016	\$51.69	\$9.20	\$16.64	\$0.00	\$77.53
	09/01/2016	\$52.69	\$9.20	\$16.64	\$0.00	\$78.53
	03/01/2017	\$53.69	\$9.20	\$16.64	\$0.00	\$79.53
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
PNEUMATIC DRILL/TOOL OPERATOR	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
LABORERS - ZONE 1	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
POWDERMAN & BLASTER	12/01/2014	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
LABORERS - ZONE 1	06/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	12/01/2015	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	06/01/2016	\$37.85	\$7.30	\$12.95	\$0.00	\$58.10
	12/01/2016	\$38.85	\$7.30	\$12.95	\$0.00	\$59.10
For apprentice rates see "Apprentice- LABORER"						

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
POWER SHOVEL/DERRICK/TRENCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$42.39	\$10.00	\$14.30	\$0.00	\$66.69
	06/01/2015	\$43.14	\$10.00	\$14.30	\$0.00	\$67.44
	12/01/2015	\$44.39	\$10.00	\$14.30	\$0.00	\$68.69
	06/01/2016	\$45.14	\$10.00	\$14.30	\$0.00	\$69.44
	12/01/2016	\$46.39	\$10.00	\$14.30	\$0.00	\$70.69
	06/01/2017	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	12/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (CONCRETE) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$42.39	\$10.00	\$14.30	\$0.00	\$66.69
	06/01/2015	\$43.14	\$10.00	\$14.30	\$0.00	\$67.44
	12/01/2015	\$44.39	\$10.00	\$14.30	\$0.00	\$68.69
	06/01/2016	\$45.14	\$10.00	\$14.30	\$0.00	\$69.44
	12/01/2016	\$46.39	\$10.00	\$14.30	\$0.00	\$70.69
	06/01/2017	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	12/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$29.40	\$10.00	\$14.30	\$0.00	\$53.70
	06/01/2015	\$29.92	\$10.00	\$14.30	\$0.00	\$54.22
	12/01/2015	\$30.79	\$10.00	\$14.30	\$0.00	\$55.09
	06/01/2016	\$31.31	\$10.00	\$14.30	\$0.00	\$55.61
	12/01/2016	\$32.18	\$10.00	\$14.30	\$0.00	\$56.48
	06/01/2017	\$32.87	\$10.00	\$14.30	\$0.00	\$57.17
	12/01/2017	\$33.56	\$10.00	\$14.30	\$0.00	\$57.86
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY MIX CONCRETE DRIVERS after 4/30/10 (Drivers Hired After 4/30/2010) <i>TEAMSTERS LOCAL 25b</i>	07/01/2014	\$27.73	\$7.73	\$8.65	\$0.00	\$44.11
	05/01/2015	\$27.88	\$7.73	\$8.92	\$0.00	\$44.53
	07/01/2015	\$27.88	\$7.98	\$8.92	\$0.00	\$44.78
	05/01/2016	\$28.03	\$7.98	\$9.31	\$0.00	\$45.32
	07/01/2016	\$28.03	\$8.23	\$9.31	\$0.00	\$45.57
	05/01/2017	\$28.18	\$8.23	\$9.72	\$0.00	\$46.13
	07/01/2017	\$28.18	\$8.48	\$9.72	\$0.00	\$46.38
READY-MIX CONCRETE DRIVER <i>TEAMSTERS LOCAL 25b</i>	07/01/2014	\$29.03	\$7.73	\$8.65	\$0.00	\$45.41
	05/01/2015	\$29.18	\$7.73	\$8.92	\$0.00	\$45.83
	07/01/2015	\$29.18	\$7.98	\$8.92	\$0.00	\$46.08
	05/01/2016	\$29.33	\$7.98	\$9.31	\$0.00	\$46.62
	07/01/2016	\$29.33	\$8.23	\$9.31	\$0.00	\$46.87
	05/01/2017	\$29.48	\$8.23	\$9.72	\$0.00	\$47.43
	07/01/2017	\$29.48	\$8.48	\$9.72	\$0.00	\$47.68
RECLAIMERS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
RESIDENTIAL WOOD FRAME (All Other Work) <i>CARPENTERS-ZONE 2 (Residential Wood)</i>	04/01/2011	\$24.24	\$8.67	\$15.51	\$0.00	\$48.42
RESIDENTIAL WOOD FRAME CARPENTER ** ** The Residential Wood Frame Carpenter classification applies only to the construction of new, wood frame residences that do not exceed four stories including the basement. <i>CARPENTERS-ZONE 2 (Residential Wood)</i> As of 9/1/09 Carpentry work on wood-frame residential WEATHERIZATION projects shall be paid the RESIDENTIAL WOOD FRAME CARPENTER rate.	05/01/2011	\$24.24	\$6.34	\$6.23	\$0.00	\$36.81

Apprentice - CARPENTER (Residential Wood Frame) - Zone 2

Effective Date - 05/01/2011

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$14.54	\$6.34	\$0.00	\$0.00	\$20.88
2	60	\$14.54	\$6.34	\$6.23	\$0.00	\$27.11
3	65	\$15.76	\$6.34	\$6.23	\$0.00	\$28.33
4	70	\$16.97	\$6.34	\$6.23	\$0.00	\$29.54
5	75	\$18.18	\$6.34	\$6.23	\$0.00	\$30.75
6	80	\$19.39	\$6.34	\$6.23	\$0.00	\$31.96
7	85	\$20.60	\$6.34	\$6.23	\$0.00	\$33.17
8	90	\$21.82	\$6.34	\$6.23	\$0.00	\$34.39

Notes:

Apprentice to Journeyworker Ratio: 1:5

RIDE-ON MOTORIZED BUGGY OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
ROLLER/SPREADER/MULCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
ROOFER (Inc. Roofer Waterproofing & Roofer Dampproofing) <i>ROOFERS LOCAL 33</i>	02/01/2015	\$40.11	\$10.50	\$11.60	\$0.00	\$62.21
	08/01/2015	\$41.01	\$10.50	\$11.60	\$0.00	\$63.11
	02/01/2016	\$41.91	\$10.50	\$11.60	\$0.00	\$64.01

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - ROOFER - Local 33

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.06	\$10.50	\$3.38	\$0.00	\$33.94
2	60	\$24.07	\$10.50	\$11.60	\$0.00	\$46.17
3	65	\$26.07	\$10.50	\$11.60	\$0.00	\$48.17
4	75	\$30.08	\$10.50	\$11.60	\$0.00	\$52.18
5	85	\$34.09	\$10.50	\$11.60	\$0.00	\$56.19

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.51	\$10.50	\$3.38	\$0.00	\$34.39
2	60	\$24.61	\$10.50	\$11.60	\$0.00	\$46.71
3	65	\$26.66	\$10.50	\$11.60	\$0.00	\$48.76
4	75	\$30.76	\$10.50	\$11.60	\$0.00	\$52.86
5	85	\$34.86	\$10.50	\$11.60	\$0.00	\$56.96

Notes: ** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1
Step 1 is 2000 hrs.; Steps 2-5 are 1000 hrs.

Apprentice to Journeyworker Ratio:**

ROOFER SLATE / TILE / PRECAST CONCRETE	02/01/2015	\$40.36	\$10.50	\$11.60	\$0.00	\$62.46
ROOFERS LOCAL 33	08/01/2015	\$41.26	\$10.50	\$11.60	\$0.00	\$63.36
	02/01/2016	\$42.16	\$10.50	\$11.60	\$0.00	\$64.26
For apprentice rates see "Apprentice- ROOFER"						
SHEETMETAL WORKER	02/01/2015	\$43.69	\$9.82	\$20.54	\$2.19	\$76.24
SHEETMETAL WORKERS LOCAL 17 - A	08/01/2015	\$44.69	\$9.82	\$20.54	\$2.19	\$77.24
	02/01/2016	\$45.69	\$9.82	\$20.54	\$2.19	\$78.24
	08/01/2016	\$46.84	\$9.82	\$20.54	\$2.19	\$79.39
	02/01/2017	\$47.94	\$9.82	\$20.54	\$2.19	\$80.49
	08/01/2017	\$49.04	\$9.82	\$20.54	\$2.19	\$81.59
	02/01/2018	\$50.19	\$9.82	\$20.54	\$2.19	\$82.74

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - SHEET METAL WORKER - Local 17-A

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.48	\$9.82	\$4.58	\$0.00	\$31.88
2	40	\$17.48	\$9.82	\$4.58	\$0.00	\$31.88
3	45	\$19.66	\$9.82	\$9.09	\$1.16	\$39.73
4	45	\$19.66	\$9.82	\$9.09	\$1.16	\$39.73
5	50	\$21.85	\$9.82	\$9.91	\$1.25	\$42.83
6	50	\$21.85	\$9.82	\$10.16	\$1.25	\$43.08
7	60	\$26.21	\$9.82	\$11.55	\$1.43	\$49.01
8	65	\$28.40	\$9.82	\$12.38	\$1.52	\$52.12
9	75	\$32.77	\$9.82	\$14.02	\$1.70	\$58.31
10	85	\$37.14	\$9.82	\$15.16	\$1.86	\$63.98

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.88	\$9.82	\$4.58	\$0.00	\$32.28
2	40	\$17.88	\$9.82	\$4.58	\$0.00	\$32.28
3	45	\$20.11	\$9.82	\$9.09	\$1.17	\$40.19
4	45	\$20.11	\$9.82	\$9.09	\$1.17	\$40.19
5	50	\$22.35	\$9.82	\$9.91	\$1.26	\$43.34
6	50	\$22.35	\$9.82	\$10.16	\$1.27	\$43.60
7	60	\$26.81	\$9.82	\$11.55	\$1.45	\$49.63
8	65	\$29.05	\$9.82	\$12.38	\$1.54	\$52.79
9	75	\$33.52	\$9.82	\$14.02	\$1.72	\$59.08
10	85	\$37.99	\$9.82	\$15.16	\$1.89	\$64.86

Notes:

Steps are 6 mos.

Apprentice to Journeyworker Ratio:1:4

SIGN ERECTOR PAINTERS LOCAL 35 - ZONE 2	06/01/2013	\$25.81	\$7.07	\$7.05	\$0.00	\$39.93
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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - SIGN ERECTOR - Local 35 Zone 2

Effective Date - 06/01/2013

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$12.91	\$7.07	\$0.00	\$0.00	\$19.98
2	55	\$14.20	\$7.07	\$2.45	\$0.00	\$23.72
3	60	\$15.49	\$7.07	\$2.45	\$0.00	\$25.01
4	65	\$16.78	\$7.07	\$2.45	\$0.00	\$26.30
5	70	\$18.07	\$7.07	\$7.05	\$0.00	\$32.19
6	75	\$19.36	\$7.07	\$7.05	\$0.00	\$33.48
7	80	\$20.65	\$7.07	\$7.05	\$0.00	\$34.77
8	85	\$21.94	\$7.07	\$7.05	\$0.00	\$36.06
9	90	\$23.23	\$7.07	\$7.05	\$0.00	\$37.35

Notes:

Steps are 4 mos.

Apprentice to Journeyworker Ratio:1:1

SPECIALIZED EARTH MOVING EQUIP < 35 TONS
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A

12/01/2014	\$32.69	\$9.91	\$9.33	\$0.00	\$51.93
06/01/2015	\$33.04	\$9.91	\$9.33	\$0.00	\$52.28
08/01/2015	\$33.04	\$10.41	\$9.33	\$0.00	\$52.78
12/01/2015	\$33.04	\$10.41	\$10.08	\$0.00	\$53.53
06/01/2016	\$33.54	\$10.41	\$10.08	\$0.00	\$54.03
08/01/2016	\$33.54	\$10.91	\$10.08	\$0.00	\$54.53
12/01/2016	\$33.54	\$10.91	\$10.89	\$0.00	\$55.34

SPECIALIZED EARTH MOVING EQUIP > 35 TONS
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A

12/01/2014	\$32.98	\$9.91	\$9.33	\$0.00	\$52.22
06/01/2015	\$33.33	\$9.91	\$9.33	\$0.00	\$52.57
08/01/2015	\$33.33	\$10.41	\$9.33	\$0.00	\$53.07
12/01/2015	\$33.33	\$10.41	\$10.08	\$0.00	\$53.82
06/01/2016	\$33.83	\$10.41	\$10.08	\$0.00	\$54.32
08/01/2016	\$33.83	\$10.91	\$10.08	\$0.00	\$54.82
12/01/2016	\$33.83	\$10.91	\$10.89	\$0.00	\$55.63

SPRINKLER FITTER
SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1

01/01/2015	\$53.58	\$8.42	\$14.75	\$0.00	\$76.75
03/01/2015	\$54.58	\$8.42	\$14.75	\$0.00	\$77.75
10/01/2015	\$55.73	\$8.42	\$14.75	\$0.00	\$78.90
01/01/2016	\$55.73	\$8.67	\$14.90	\$0.00	\$79.30
03/01/2016	\$56.73	\$8.67	\$14.90	\$0.00	\$80.30
10/01/2016	\$57.88	\$8.67	\$14.90	\$0.00	\$81.45
03/01/2017	\$58.88	\$8.67	\$14.90	\$0.00	\$82.45

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - *SPRINKLER FITTER - Local 550 (Section A) Zone 1*

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$18.75	\$8.42	\$8.40	\$0.00	\$35.57
2	40	\$21.43	\$8.42	\$8.40	\$0.00	\$38.25
3	45	\$24.11	\$8.42	\$8.40	\$0.00	\$40.93
4	50	\$26.79	\$8.42	\$8.40	\$0.00	\$43.61
5	55	\$29.47	\$8.42	\$8.40	\$0.00	\$46.29
6	60	\$32.15	\$8.42	\$8.40	\$0.00	\$48.97
7	65	\$34.83	\$8.42	\$8.40	\$0.00	\$51.65
8	70	\$37.51	\$8.42	\$8.40	\$0.00	\$54.33
9	75	\$40.19	\$8.42	\$8.40	\$0.00	\$57.01
10	80	\$42.86	\$8.42	\$8.40	\$0.00	\$59.68

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$19.10	\$8.42	\$8.40	\$0.00	\$35.92
2	40	\$21.83	\$8.42	\$8.40	\$0.00	\$38.65
3	45	\$24.56	\$8.42	\$8.40	\$0.00	\$41.38
4	50	\$27.29	\$8.42	\$8.40	\$0.00	\$44.11
5	55	\$30.02	\$8.42	\$8.40	\$0.00	\$46.84
6	60	\$32.75	\$8.42	\$8.40	\$0.00	\$49.57
7	65	\$35.48	\$8.42	\$8.40	\$0.00	\$52.30
8	70	\$38.21	\$8.42	\$8.40	\$0.00	\$55.03
9	75	\$40.94	\$8.42	\$8.40	\$0.00	\$57.76
10	80	\$43.66	\$8.42	\$8.40	\$0.00	\$60.48

Notes: Apprentice entered prior 9/30/10:
40/45/50/55/60/65/70/75/80/85
Steps are 850 hours

Apprentice to Journeyworker Ratio:1:3

STEAM BOILER OPERATOR
OPERATING ENGINEERS LOCAL 4

12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TELECOMMUNICATION TECHNICIAN <i>ELECTRICIANS LOCAL 103</i>	09/01/2014	\$33.59	\$13.00	\$13.36	\$0.00	\$59.95
	03/01/2015	\$33.88	\$13.00	\$13.70	\$0.00	\$60.58
	09/01/2015	\$34.60	\$13.00	\$13.72	\$0.00	\$61.32
	03/01/2016	\$35.31	\$13.00	\$13.74	\$0.00	\$62.05

Apprentice - TELECOMMUNICATION TECHNICIAN - Local 103

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$13.44	\$13.00	\$0.40	\$0.00	\$26.84
2	40	\$13.44	\$13.00	\$0.40	\$0.00	\$26.84
3	45	\$15.12	\$13.00	\$10.57	\$0.00	\$38.69
4	45	\$15.12	\$13.00	\$10.57	\$0.00	\$38.69
5	50	\$16.80	\$13.00	\$10.83	\$0.00	\$40.63
6	55	\$18.47	\$13.00	\$11.08	\$0.00	\$42.55
7	60	\$20.15	\$13.00	\$11.33	\$0.00	\$44.48
8	65	\$21.83	\$13.00	\$11.59	\$0.00	\$46.42
9	70	\$23.51	\$13.00	\$11.85	\$0.00	\$48.36
10	75	\$25.19	\$13.00	\$12.10	\$0.00	\$50.29

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$13.55	\$13.00	\$0.41	\$0.00	\$26.96
2	40	\$13.55	\$13.00	\$0.41	\$0.00	\$26.96
3	45	\$15.25	\$13.00	\$10.87	\$0.00	\$39.12
4	45	\$15.25	\$13.00	\$10.87	\$0.00	\$39.12
5	50	\$16.94	\$13.00	\$11.11	\$0.00	\$41.05
6	55	\$18.63	\$13.00	\$11.38	\$0.00	\$43.01
7	60	\$20.33	\$13.00	\$11.64	\$0.00	\$44.97
8	65	\$22.02	\$13.00	\$11.89	\$0.00	\$46.91
9	70	\$23.72	\$13.00	\$12.15	\$0.00	\$48.87
10	75	\$25.41	\$13.00	\$12.41	\$0.00	\$50.82

Notes:

Apprentice to Journeyworker Ratio:1:1

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TERRAZZO FINISHERS <i>BRICKLAYERS LOCAL 3 - MARBLE & TILE</i>	02/01/2015	\$47.90	\$10.18	\$18.50	\$0.00	\$76.58
	08/01/2015	\$48.80	\$10.18	\$18.57	\$0.00	\$77.55
	02/01/2016	\$49.37	\$10.18	\$18.57	\$0.00	\$78.12
	08/01/2016	\$50.27	\$10.18	\$18.65	\$0.00	\$79.10
	02/01/2017	\$50.84	\$10.18	\$18.65	\$0.00	\$79.67

Apprentice - TERRAZZO FINISHER - Local 3 Marble & Tile

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.95	\$10.18	\$18.50	\$0.00	\$52.63
2	60	\$28.74	\$10.18	\$18.50	\$0.00	\$57.42
3	70	\$33.53	\$10.18	\$18.50	\$0.00	\$62.21
4	80	\$38.32	\$10.18	\$18.50	\$0.00	\$67.00
5	90	\$43.11	\$10.18	\$18.50	\$0.00	\$71.79

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.40	\$10.18	\$18.57	\$0.00	\$53.15
2	60	\$29.28	\$10.18	\$18.57	\$0.00	\$58.03
3	70	\$34.16	\$10.18	\$18.57	\$0.00	\$62.91
4	80	\$39.04	\$10.18	\$18.57	\$0.00	\$67.79
5	90	\$43.92	\$10.18	\$18.57	\$0.00	\$72.67

Notes:

Apprentice to Journeyworker Ratio:1:3

TEST BORING DRILLER <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2014	\$35.95	\$7.30	\$13.15	\$0.00	\$56.40
	06/01/2015	\$36.70	\$7.30	\$13.15	\$0.00	\$57.15
	12/01/2015	\$37.45	\$7.30	\$13.15	\$0.00	\$57.90
	06/01/2016	\$38.20	\$7.30	\$13.15	\$0.00	\$58.65
	12/01/2016	\$39.20	\$7.30	\$13.15	\$0.00	\$59.65

For apprentice rates see "Apprentice- LABORER"

TEST BORING DRILLER HELPER <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2014	\$34.67	\$7.30	\$13.15	\$0.00	\$55.12
	06/01/2015	\$35.42	\$7.30	\$13.15	\$0.00	\$55.87
	12/01/2015	\$36.17	\$7.30	\$13.15	\$0.00	\$56.62
	06/01/2016	\$36.92	\$7.30	\$13.15	\$0.00	\$57.37
	12/01/2016	\$37.92	\$7.30	\$13.15	\$0.00	\$58.37

For apprentice rates see "Apprentice- LABORER"

TEST BORING LABORER <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2014	\$34.55	\$7.30	\$13.15	\$0.00	\$55.00
	06/01/2015	\$35.30	\$7.30	\$13.15	\$0.00	\$55.75
	12/01/2015	\$36.05	\$7.30	\$13.15	\$0.00	\$56.50
	06/01/2016	\$36.80	\$7.30	\$13.15	\$0.00	\$57.25
	12/01/2016	\$37.80	\$7.30	\$13.15	\$0.00	\$58.25

For apprentice rates see "Apprentice- LABORER"

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TRACTORS/PORTABLE STEAM GENERATORS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TRAILERS FOR EARTH MOVING EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2014	\$33.27	\$9.91	\$9.33	\$0.00	\$52.51
	06/01/2015	\$33.62	\$9.91	\$9.33	\$0.00	\$52.86
	08/01/2015	\$33.62	\$10.41	\$9.33	\$0.00	\$53.36
	12/01/2015	\$33.62	\$10.41	\$10.08	\$0.00	\$54.11
	06/01/2016	\$34.12	\$10.41	\$10.08	\$0.00	\$54.61
	08/01/2016	\$34.12	\$10.91	\$10.08	\$0.00	\$55.11
	12/01/2016	\$34.12	\$10.91	\$10.89	\$0.00	\$55.92
TUNNEL WORK - COMPRESSED AIR <i>LABORERS (COMPRESSED AIR)</i>	12/01/2014	\$46.83	\$7.30	\$13.55	\$0.00	\$67.68
	06/01/2015	\$47.58	\$7.30	\$13.55	\$0.00	\$68.43
	12/01/2015	\$48.33	\$7.30	\$13.55	\$0.00	\$69.18
	06/01/2016	\$49.08	\$7.30	\$13.55	\$0.00	\$69.93
	12/01/2016	\$50.08	\$7.30	\$13.55	\$0.00	\$70.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) <i>LABORERS (COMPRESSED AIR)</i>	12/01/2014	\$48.83	\$7.30	\$13.55	\$0.00	\$69.68
	06/01/2015	\$49.58	\$7.30	\$13.55	\$0.00	\$70.43
	12/01/2015	\$50.33	\$7.30	\$13.55	\$0.00	\$71.18
	06/01/2016	\$51.08	\$7.30	\$13.55	\$0.00	\$71.93
	12/01/2016	\$52.08	\$7.30	\$13.55	\$0.00	\$72.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR <i>LABORERS (FREE AIR TUNNEL)</i>	12/01/2014	\$38.90	\$7.30	\$13.55	\$0.00	\$59.75
	06/01/2015	\$39.65	\$7.30	\$13.55	\$0.00	\$60.50
	12/01/2015	\$40.40	\$7.30	\$13.55	\$0.00	\$61.25
	06/01/2016	\$41.15	\$7.30	\$13.55	\$0.00	\$62.00
	12/01/2016	\$42.15	\$7.30	\$13.55	\$0.00	\$63.00
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR (HAZ. WASTE) <i>LABORERS (FREE AIR TUNNEL)</i>	12/01/2014	\$40.90	\$7.30	\$13.55	\$0.00	\$61.75
	06/01/2015	\$41.65	\$7.30	\$13.55	\$0.00	\$62.50
	12/01/2015	\$42.40	\$7.30	\$13.55	\$0.00	\$63.25
	06/01/2016	\$43.15	\$7.30	\$13.55	\$0.00	\$64.00
	12/01/2016	\$44.15	\$7.30	\$13.55	\$0.00	\$65.00
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2014	\$32.69	\$9.91	\$9.33	\$0.00	\$51.93
	06/01/2015	\$33.04	\$9.91	\$9.33	\$0.00	\$52.28
	08/01/2015	\$33.04	\$10.41	\$9.33	\$0.00	\$52.78
	12/01/2015	\$33.04	\$10.41	\$10.08	\$0.00	\$53.53
	06/01/2016	\$33.54	\$10.41	\$10.08	\$0.00	\$54.03
	08/01/2016	\$33.54	\$10.91	\$10.08	\$0.00	\$54.53
	12/01/2016	\$33.54	\$10.91	\$10.89	\$0.00	\$55.34

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
WAGON DRILL OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
WASTE WATER PUMP OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$42.39	\$10.00	\$14.30	\$0.00	\$66.69
	06/01/2015	\$43.14	\$10.00	\$14.30	\$0.00	\$67.44
	12/01/2015	\$44.39	\$10.00	\$14.30	\$0.00	\$68.69
	06/01/2016	\$45.14	\$10.00	\$14.30	\$0.00	\$69.44
	12/01/2016	\$46.39	\$10.00	\$14.30	\$0.00	\$70.69
	06/01/2017	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	12/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
WATER METER INSTALLER <i>PLUMBERS & GASFITTERS LOCAL 12</i>	09/01/2014	\$49.66	\$10.32	\$14.54	\$0.00	\$74.52
	03/01/2015	\$50.66	\$10.32	\$14.54	\$0.00	\$75.52
	09/01/2015	\$51.66	\$10.32	\$14.54	\$0.00	\$76.52
	03/01/2016	\$52.81	\$10.32	\$14.54	\$0.00	\$77.67
	09/01/2016	\$53.86	\$10.32	\$14.54	\$0.00	\$78.72
	03/01/2017	\$54.86	\$10.32	\$14.54	\$0.00	\$79.72
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"						

Additional Apprentice Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentice ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

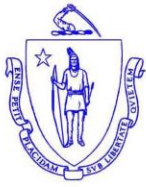
All steps are six months (1000 hours.)

Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified.

** Multiple ratios are listed in the comment field.

*** APP to JM; 1:1, 2:2, 2:3, 3:4, 4:4, 4:5, 4:6, 5:7, 6:7, 6:8, 6:9, 7:10, 8:10, 8:11, 8:12, 9:13, 10:13, 10:14, etc.

**** APP to JM; 1:1, 1:2, 2:3, 2:4, 3:5, 4:6, 4:7, 5:8, 6:9, 6:10, 7:11, 8:12, 8:13, 9:14, 10:15, 10:16, etc.



THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF LABOR
DIVISION OF OCCUPATIONAL SAFETY
PREVAILING WAGE PROGRAM
www.mass.gov/dos/pw

NOTICE: TO AWARDING AUTHORITIES AND CONTRACTORS

ISSUED: SEPTEMBER 1, 2006

DRIVERS WHO HAUL BITUMINOUS CONCRETE (ASPHALT)

The Massachusetts Supreme Judicial Court recently affirmed that drivers who haul bituminous concrete to public construction projects are not covered by the Prevailing Wage Law while off-site, including time spent over-the-road and picking-up materials. These drivers are covered by the Prevailing Wage Law only while on-site at the public construction project.

In Teamsters Joint Council No. 10 v. Department of Labor, et al., 447 Mass. 100 (2006), the SJC upheld a 2001 administrative decision limiting the applicability of prevailing wage rates to the time bituminous drivers spend at the public construction site. This most recent decision of the SJC followed a 1989 ruling that had upheld an earlier Department of Labor (and Industries') policy that had deemed this category of drivers to be "teamsters" under the Law and, therefore, entitled to prevailing wage rates. See Construction Industries of Massachusetts v. Commissioner of Labor and Industries, 406 Mass. 162 (1989). However, the earlier court case had left open the question of whether this entitled these bituminous drivers to prevailing wage rates for their over-the-road time as well as their on-site time. This most recent decision has now answered that question.

All of the requirements of the Prevailing Wage Law, including certified weekly payroll requirements, apply to bituminous drivers for all time spent at the public construction site.

DRIVERS WHO HAUL READY-MIX CONCRETE (CEMENT)

Drivers who haul ready-mix concrete to public construction projects are not covered by the Prevailing Wage Law while off-site, including time spent over-the-road and picking-up materials. These drivers are covered by the Prevailing Wage Law while on-site at the public construction project. This applicability determination was established by a 2001 administrative decision of the Department of Labor's Division of Occupational Safety.

All of the requirements of the Prevailing Wage Law, including certified weekly payroll requirements, apply to ready-mix drivers for all time spent at the public construction site.

Please feel free to contact the Division of Occupational Safety at 617-626-6953 if you have any questions. Questions about enforcement of the Prevailing Wage Law may be directed to the Attorney General's Fair Labor and Business Practices Division at 617-727-3465

The Massachusetts Prevailing Wage Law M.G.L. ch. 149, §§ 26 – 27

NOTICE TO AWARDING AUTHORITIES

- 'The enclosed wage schedule applies only to the specific project listed at the top and will be updated for any public construction project lasting longer than one (1) year.
- 'You should request an updated wage schedule from the Division of Occupational Safety if you have not opened bids or selected a contractor within 90 days of the date of issuance of the enclosed wage schedule.
- 'The wage schedule shall be incorporated in any advertisement or call for bids for the project for which it has been issued.
- 'Once a contractor has been selected by the awarding authority, the wage schedule shall be made a part of the contract for that project.

NOTICE TO CONTRACTORS

- The enclosed wage schedule, and any updated schedule, must be posted in a conspicuous place at the work site during the life of the project.
- The wages listed on the enclosed wage schedule must be paid to employees on public works projects regardless of whether they are employed by the prime contractor, a filed sub-bidder, or any sub-contractor.
- The enclosed wage schedule applies to all phases of the project including the final clean-up. Contractors whose only role is to perform final clean-up must pay their employees according to this wage schedule.
- All apprentices must be registered with the Massachusetts Division of Apprentice Training in order to be paid at the reduced apprentice rates. If a worker is not registered with the Division of Apprentice Training, they must be paid the “total rate” listed on the wage schedule regardless of experience or skill level. For further information, please call (617) 727-3486 or write to the Division of Apprentice Training, 399 Washington Street, 4th Floor, Boston, MA 02108

WEEKLY PAYROLL RECORDS REPORT & STATEMENT OF COMPLIANCE

In accordance with Massachusetts General Law c149, §27B, a true and accurate record must be kept of all persons employed on the public works project for which the enclosed rates have been provided. A Payroll Form has been printed on the reverse of this page and includes all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

In addition, every contractor and subcontractor is required to submit a copy of their weekly payroll records to the awarding authority. This is required to be done on a weekly basis. Once collected, the awarding authority is also required to preserve those records for three years.

In addition, each such contractor, subcontractor or public body shall furnish to the Department of Labor & Workforce Development/Division of Occupational Safety within fifteen days after completion of its portion of the work a statement, executed by the contractor, subcontractor or public body who supervises the payment of wages, in the following form:

STATEMENT OF COMPLIANCE

_____, 2015

I, _____,

(Name of signatory party) (Title)

do hereby state:

That I pay or supervise the payment of the persons employed by

_____ on the _____

(Contractor, subcontractor or public body)

(Building or project)

and that all mechanics and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty nine of the General Laws.

Signature _____

Title _____

DIVISION OF OCCUPATIONAL SAFETY, 399 WASHINGTON STREET, 5TH FL., BOSTON, MA. 02108

CITY OF NEWTON

SUMMARY OF WORK AND SPECIFIC REQUIREMENTS OF THE CONTRACT FOR PUBLIC WORKS CONSTRUCTION

A. SUMMARY OF WORK

1.

The work of this contract consists of but is not limited to: Rehabilitation of an existing reinforced concrete roadway followed by the final overlay of the entire project area with bituminous concrete upon completion of all specified remedial measures.

* Notice #1: The quantities represented in this Invitation For Bid are dependent on Massachusetts Department of Transportation (MassDOT) Chapter 90 funding. These monies are traditionally allotted, and subsequently apportioned by the City of Newton, on or about April 1 of each calendar year. Therefore the quantities listed in this Invitation For Bid may be revised at the time of the bid award.

2. All other work described in the Project Manual and/or shown on the Plan(s) unless specifically indicated as not to be done.

B. In addition the work under the contract includes:

1. Work outside the Project Site as called for in the Project Manual and/or Plan(s) and as required for the performance of the work.
2. The restoration of any items damaged or destroyed by encroaching upon areas outside the Project Site.
3. All labor, materials, tools, and equipment necessary to do all the work required for the completion of each item as specified, which shall limited not only to the exact intent mentioned, but shall include incidental work necessary or customarily performed for the completion of that item.
4. All items not specifically mentioned or noted in the Project Manual and/or Plan(s), but which are obviously necessary to make a complete working installation.

C. The Proposed Contract Price shall be complete costs, including overhead, profit, insurance, transportation, and all other costs connected with, or incidental to the work described.

II. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

A. Upon notification the Contractor shall commence the work specified in the Project Manual as directed by the City. The work shall proceed in a continuous uninterrupted fashion with adequately staffed crews, in a satisfactory manner, which will assure that the work is completed in a timely manner to the satisfaction of the City.

B. The time for substantial completion pursuant to Article 2 of the Contract shall:

NOTICE: * TIME IS OF THE ESSENCE *

Within five (5) business days of the Notice Of Award the Contractor shall submit to the Purchasing Department:

- **A signed contract.**
- **A Certificate of Insurance (naming the City as an additional insured)**
- **A Labor and Materials Payment Bond in the amount of 50% of the contract total.**

Anticipated start date is June 25th, 2015. Time for completion is sixty (60) calendar days from the Notice To Proceed. The successful bidder must be ready, willing and able to accommodate the City of Newton in the scheduling of this work.

Time is of the essence for the completion of this contract. If the Contractor fails to achieve substantial or final completion of the Work within the time required by the contract, and unless an extension of time is granted, the Contractor shall pay to the City as liquidated damages, the applicable amount specified in **Article 6A** of the **General Conditions** for each day of delay. If different completion dates are specified in the Contract for separate parts or stages of the work, the amount of liquidated damages shall be assessed on those parts or stages which are delayed. To the extent that the Contractor's delay or nonperformance is excused under another section in this Contract, liquidated damages shall not be due the City. The Contractor remains liable for damages caused other than by delay.

III. INSURANCE REQUIREMENTS

- A. The Contractor shall carry and maintain until acceptance of the work such Workmen's Compensation, Automobile Liability, Public Liability, Contingent Public Liability, Property Damage and Contingent Property Damage Insurance, each including blasting coverage, as shall protect him and any sub-contractor performing work covered by this contract from all claims and liability for damages for personal injury, including accidental death, and for property damage which may arise from operations under this contract, whether such operations be by himself or by any sub-contractor or by any one directly or indirectly employed by either of them.
- B. The City shall be named as an additional insured on such policy.
- C. The amounts of such insurance shall be as follows:
 - 1. Workmen's Compensation Insurance as required by Massachusetts General Law.
 - 2. Automobile Liability Insurance on all vehicles owned or hired for a.) Bodily Injury in an amount not less than \$500,000.00 for each occurrence, and not less than \$1,000,000.00 aggregate; b.) Property Damage in an amount not less than \$250,000.00 each occurrence, and not less than \$500,000.00 aggregate.
 - 3. Public Liability Insurance and Contingent Public Liability Insurance in an amount not less than \$500,000.00 for injuries, including accidental death to any one person, and subject to the same limit for each person, in an amount not less than \$1,000,000.00 on account of one accident.
 - 4. Property Damage Insurance and Contingent Property Damage Insurance in an amount not less than \$300,000.00 on account of one accident, and in an amount of not less than \$500,000.00 on account of all accidents.
 - 5. General Liability Insurance shall include Contractual Liability Insurance.

- D. Before any work is started, the successful bidder shall be required to file with the Chief Procurement Officer certificates of insurance coverage as detailed above, with policy numbers and dates of expiration.
- E. The Contractor shall indemnify, hold harmless and defend the City and its departments, officers, employees, servants, and agents from and against all actions, causes of actions, claims, demands, damages, costs, loss of services, expenses and compensation, including attorney's fees and interest arising out of or resulting directly or indirectly from the services rendered pursuant to this Contract, provided that any such action, cause of action, claim, demand, damage, cost, loss of service, expense, compensation (1) in any way grows out of bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, which (2) is caused in whole or in part by any act or omission of the Contractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

END OF SECTION

CITY OF NEWTON
GENERAL CONDITIONS OF THE CONTRACT
FOR PUBLIC WORKS CONSTRUCTION

ARTICLE 1

Definitions

The word "Commissioner" shall mean the official duly authorized to act for the City of Newton in the execution of the work of this contract, acting directly or through properly authorized agents.

The word "Engineer," or "City Engineer," shall mean the City Engineer of the City of Newton, acting directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

The word "Contractor" shall mean the party or parties contracting to perform the work covered by this contract or his, or their, legal representatives, successors or assigns.

The word "Plans" shall mean plans, and all related drawings, diagrams, profiles and specifications referred to and included in the Project Manual for this contract.

The word "City" shall mean the City of Newton.

The word "Project" shall mean the services which are the subject of the Contract Documents.

The words "Subcontract" and "Subcontractor" shall refer to project contracts between the Contractor and a subcontractor, and the subcontractor thereunder.

The term "Substantial Completion" shall mean either that the work required by the contract has been completed except for the work having a contract price of less than one per cent of the then adjusted contract price, or substantially all of the work has been completed and opened to public use except for minor incomplete or unsatisfactory work items that do not materially impair the usefulness of the work required by the contract.

ARTICLE 2
Plans, Drawings, Profiles

1.The work shall be done in accordance with Plans referred to in Article 1 and such further working and detail plans, drawings and profiles as may be furnished from time to time by the Engineer. All said plans, general and detail, are to be deemed a part of this contract, and the said Plans, specifications and contract are to be considered together, so that any work mentioned in the contract, though not shown on the Plans, and any work shown on the Plans though not mentioned in the contract, is to be provided by the Contractor as a part of this contract. Figured dimensions are to prevail over scale. All things which in the opinion of the Engineer may fairly be inferred from the contract, Plans and specifications, are to be executed by the Contractor as a part of the contract; and the Engineer shall be sole judge as to whether detail plans, drawings and profiles conform to the Plans and the contract.

Discrepancy in Plans

2.The Contractor shall carefully examine all said Plans, profiles, drawings, specifications and orders; all figures, dimensions, lines, marks and scales thereof, and all directions of the Commissioner and the Engineer relating to the work, and conform to those in relation to which there is no doubt or discrepancy, but at once submit all cases of doubt or discrepancy to the Engineer for adjustment. Anything done on any part of the work for which special information or drawing should be procured, unless done in accordance with such information or drawing, or anything done in relation to which there is doubt or discrepancy, except in accordance with the adjustment thereof, or done in violation of law or public authority, is to be redone if the Commissioner shall so direct.

ARTICLE 3

Inspection

The Contractor in carrying on the contract shall conform to all determinations and directions of the Engineer relating to the proper interpretation of the Plans, , the fitness of persons employed on the work or the number thereof, or the suitability, amount, quality, and value of anything done or any materials used, and the Contractor shall permit the Commissioner and/or the Engineer and/or persons designated by them to enter upon the work and inspect the same at all times and in all places, and shall provide safe and convenient facilities for making such entry and inspection.

ARTICLE 4

Change in Plans and Work

The City, acting through the Commissioner and upon his written order only, from time to time given to the Contractor or his foreman, may change, increase or take away any part of the work, or change the specifications, Plans, drawings, form or materials thereof. Any deduction or addition thereto is to be allowed, or paid for at a price to be determined, within not more than 15 days of the completion of the change, by the City Engineer acting in the same capacity as an architect in a building contract as between City and Contractor. Any demand for addition or deduction must be made in writing to the City Engineer within seven (7) days of the time change was ordered.

ARTICLE 5

Time and Manner of Doing the Work

1. The Contractor shall begin work upon receipt of written Notice to Proceed. Once begun the work shall be carried out in a continuous and uninterrupted fashion with sufficient workforce and resources to assure completion by the date for completion established by the Contract Documents.

2. The Contractor shall carry on the work in accordance with the requirements of law and of all other public authorities, and to the satisfaction of the Commissioner; he shall give all notices, take out all permits, pay all charges and fees, give personal supervision to the work and keep thereon a competent foreman and sufficient employees, skilled in the several parts which are given them to do.

Maintenance of Travel

3. As applicable, the Contractor shall conduct his work so as to interfere as little as possible with public travel, and shall give property owners proper means of access to their property where existing access has been cut off by the work. The Contractor shall keep the streets open for through travel except where, in the opinion of the Commissioner, it is necessary to close the street. The continuous length of the street occupied for the work shall be kept as short as possible, and no part of the work shall be unnecessarily delayed. Wherever the Commissioner shall direct, trenches shall be bridged by the Contractor in a proper and secure manner so as not to interrupt travel. Free access shall be maintained at all times to all water gates, gas gates, and fire hydrants.

Abandonment of Work by Contractor

4. In the event the City Engineer certifies to the Commissioner that the work is not being so carried forward or if the Contractor at any time is not carrying on the work to the satisfaction of the Commissioner, or is not observing any of the provisions of the contract, or has abandoned the work, or become insolvent or assigned his property, the City, acting by the Commissioner and at his discretion, may, with or without notice to the Contractor, or advertising for doing the work, and by contract, day labor or otherwise, do any part of the work which the Contractor has failed to do or replace any part not done to the satisfaction of the Commissioner, or take possession of the work and complete the same, and in doing so may use any implements, machinery or materials on or about the work which are the property of the Contractor, charging the Contractor any excess cost for completing the work, which excess cost the Contractor agrees to pay.

ARTICLE 6

Compensation for Work

1. Subject to the provisions of Paragraph 10 of this Article, the price named in the proposal and accepted by the City shall be paid by the City and received by the Contractor as full compensation for furnishing materials and for use of tools, forms, machinery and other implements, and for labor in moving materials and executing all the work contemplated in this contract, also for loss or damage arising from delay however occasioned, or out of the nature of the work aforesaid or from the action of the elements, from floods, or from any unforeseen obstructions or difficulties which may be encountered in the prosecution of the same and for all risks of every description connected with the work and for well and faithfully completing the work in the proper manner and according to the plans and specifications and requirements of the Commissioner under them.

2. During the first week of each calendar month, the City Engineer shall cause all work done by the Contractor during the previous month to be measured and shall estimate the value thereof and, on or before the 10th of each month issue a certificate to the Commissioner of the measurements and the amount due the Contractor according to the terms of his contract.

3. The City shall pay the Contractor on approval of the Commissioner monthly on or before the 18th of each month for all work done during the preceding month according to the aforementioned certificate of the City Engineer, less 5 per cent of the amount of such work and less any amounts due the City by the Contractor.

Final and Substantial Completion

4. Upon substantial completion of the work required by the Contract, the Contractor must present to the City Engineer written certification that the work is substantially complete. Within 21 calendar days after such certification is presented, the City Engineer shall present to the Contractor either a written declaration that the work is substantially complete or an itemized list of incomplete or unsatisfactory work items sufficient to demonstrate that the work is not substantially complete. The City Engineer shall include with such itemized list a date by which the work items must be completed, which date may not be earlier than the date for substantial completion established in the Contract Documents. If the City Engineer does not respond as provided herein within 21 calendar days, then the date of the Contractor's certification shall become the date for effective declaration of substantial completion.

5. Within 15 calendar days after the effective declaration of substantial completion, the City Engineer shall send to the Contractor by certified mail, return receipt requested, a complete list of all incomplete or unsatisfactory work items. Unless delayed by causes beyond the Contractor's control, with an extension of time granted pursuant to Article 8, the Contractor must complete the work items within 45 calendar days after receipt of the list, or by the contractual completion date, whichever is later. If the contractor fails to complete the work within the required time the City may, notwithstanding other rights and remedies at its disposal, and upon seven days written notice to the Contractor terminate the contract and complete the incomplete or unsatisfactory work items and charge the cost of same to the Contractor.

6. Within 65 calendar days following the effective declaration of substantial completion, the City Engineer shall issue to the Commissioner who shall cause to be paid to the Contractor a substantial completion estimate which estimate shall consist of the balance of the then current contract price less a one percent retention, the estimated cost to complete incomplete or unsatisfactory work items, the value of any outstanding claims against the Contractor and the sum of all demands for direct payment made pursuant to Article 12 herein, provided that until final acceptance, the City shall retain five percent of the value of all items planted in the ground.

7. The Contractor shall provide written notice to the City Engineer when the work has been brought to final completion. Within ten days following receipt of such notice, and providing his inspection shows no work items remain incomplete or unsatisfactory, the City Engineer shall issue to the Commissioner a final certificate of the total amount of work done and the money due the Contractor therefor, crediting thereon the amounts of the previous payments. In making the final certificate, the City Engineer shall not be bound by any preceding certificate or estimate of the amount of work done or materials furnished.

8. Within 30 calendar days following receipt of final completion, the City shall pay the Contractor, on the approval of the Commissioner, the percentages retained and the balance due the Contractor according to the aforementioned final certificate of the City Engineer less any indebtedness of the Contractor for incomplete or unsatisfactory work or claims made by or against the City. If a claim or claims are made, or notice of liability given, such amounts due the Contractor

may be paid upon satisfaction of such claims or upon furnishing of indemnity to said City against all loss, cost, damage or expense by reason of such claims.

9. The City, on making any payment after the completion of the work, shall be released from all claim or liability to the Contractor for anything done or used, or for any loss or injury sustained in carrying on the contract, or for any act, omission, neglect or mistake of the City or any person relating to or affecting the contract, except for the balance of any sum retained as aforesaid.

Extra Work

10. The Contractor shall be paid for any additions, or deductions as provided in Article 4, paragraph 1, and for extra labor done by, and for extra materials furnished by him in compliance with the written order only of the Commissioner, calling for work not similar in character to that covered by the items given in the proposal, and for which no price is set in the said written order, the direct (not including consequential) cost to the Contractor, as determined to be reasonable by the Commissioner, plus fifteen per cent of said costs as so determined in regard to labor only. For teams or trucks so furnished, no payment shall be made to the Contractor beyond the current local rate as determined by the Commissioner in each case. The direct cost of labor may include the cost of mechanics and laborers furnished and a reasonable proportion of the time of the foreman and timekeeper, but it shall in no case include any charge for the use of tools, for establishment charges or for time spent by the Contractor. The actual cost of insurance on extra pay rolls and of materials furnished for extra work, shall be paid without any addition. The labor and materials so ordered shall constitute a part of the work to be done under the contract; and all and singular the provisions of the contract shall apply to said labor and materials as if the same were specified therein. The Contractor shall have no claim for the above mentioned extra labor and materials unless he furnishes the details and bills therefor within one week after doing any such labor or furnishing any such materials.

11. No claim of the Contractor against the City under this contract shall be deemed valid unless such claim is presented to the Commissioner within ten days from the time when the Contractor first knows of, or has opportunity to know of, the acts and circumstances on which such claim is based.

12. A payment or payments to the Contractor, in cases where these provisions or any of them, are not complied with, shall not be construed as a waiver of said provisions or any part thereof.

Contract Made Subject to Appropriations

13. This contract is made subject to appropriation heretofore made and shall not be altered unless the Contractor, the sureties on the bond, if any, the officer making the contract and the Mayor shall in writing agree thereto.

ARTICLE 7

Liquidated Damages

1. T In case the work embraced in the contract shall not have been substantially completed by the date(s) stipulated therein, the Contractor shall pay to the City of Newton as liquidated damages a designated sum per calendar day for the entire period of overrun until the work is substantially completed in accordance with the following Schedule of Deductions and, in addition, the Contractor shall pay without reimbursement the entire cost of all traffic officers, railroad flagmen, inspectors, or other personnel the City Engineer and/or the Chief Engineer of the railroad determines to be necessary during the period of overrun of time.

SCHEDULE OF DEDUCTIONS

<u>Original Contract Amount From More Than</u>	<u>To and Including</u>	<u>Daily Charge Per Calendar Day</u>
\$ 0.	\$ 25,000.	\$ 30.
25,000.	50,000.	50.
50,000.	100,000.	100.
500,000.	1,000,000.	150.
1,000,000.	2,000,000.	200.
2,000,000.	—	300.

2. In case the work covered by the contract shall not have been brought to final completion within 45 calendar days following the date of declaration of substantial completion, the Contractor shall pay to the City of Newton as liquidated damages the sum of \$150.00 for each week or portion thereof during the period of overrun until the work is complete.

3. Whatever sum of money may become due and payable to the City of Newton by the Contractor under this Article may be retained out of money belonging or owed to the Contractor in the hands and possession of or by the City of Newton. It is agreed that this Article shall be construed and treated by the parties to the contract not as imposing a penalty upon said Contractor for failing fully to complete said work as agreed on or before the time specified in the proposal, but as liquidated damages to compensate said City of Newton for all additional costs incurred by it because of the failure of the Contractor fully to complete said work on or before the date of completion specified in the proposal.

ARTICLE 8

Delays and Extensions of Time

1. If the Contractor is delayed at any time in the progress of the work by an act or neglect of the City, or by changes in the work ordered by the City, or by unseasonably inclement weather, or by other causes deemed by the City Engineer to be beyond the Contractor's control, and which the City Engineer determines may justify delay, then the time for completion may be extended for such reasonable time as the City Engineer may determine.

2. No such extension of time will be allowed unless the Contractor submits a written request for an extension to the City Engineer no later than 10 calendar days of the start of the occurrence or event giving rise thereto. Each such request must describe the occurrence or event and specify the manner and extent that such occurrence or event is causing or has caused a delay in the work. The City Engineer shall promptly investigate each request and make his written determination to the Commissioner and the Contractor within 10 days after receipt of the request. In his determination the City Engineer may either grant, deny, or modify the length of the requested extension.

3. If the City Engineer's determination so warrants, the Commissioner shall authorize a written Change Order to the Contract extending the time for completion. No extension of time shall be deemed as granted until said Change Order has been duly executed by the parties.

4. Change Orders which may be executed by the City and the Contractor in connection with additions, extra labor and/or extra materials shall not be considered as allowing extensions of the time for completion unless the change order expressly specifies that additional time is allowed in connection with the work under the change order. Once a Change Order has been executed by the parties, any request by the Contractor for an extension of time based solely on the fact that additions, extra labor and/or extra materials are required by the Change Order will be denied by the City Engineer.

5. Permitting the Contractor to continue and finish the work or any part of it after the times fixed for its completion, or after the date to which the time for completion may have been extended, shall in no way operate as a waiver on the part of the City of Newton of any of its rights under the contract. The Contractor remains liable for damages caused other than by delay.

ARTICLE 9

Lines and Grades

The Contractor shall retain a Registered Land Surveyor who shall furnish such boards and stakes and cause to be placed thereon, such lines, marks and directions relating to the work as the Commissioner or City Engineer shall from time to time direct.

ARTICLE 10

Public Service Pipes and Conduits

1. The Contractor shall maintain such pipes or conduits of public service corporations or of the City as are across or within the lines of the work until such time as said public service corporations or the City assume the maintenance or removal of said pipes or conduits. The Commissioner will notify such public service corporations to that effect on the existence of such obstructions to the work being brought to his notice by the Contractor. The City will relocate either temporarily or permanently all water mains and water service pipes, or hydrants, and drains or sewers which may interfere with the work contemplated in this contract. (This clause is not to be construed as applying to such pipes as may be readily

supported and protected during the progress of the work.) The cost of shutting off and turning on water in water mains during blasting shall be assumed by the City.

Protection of Existing Structures

2. All existing gas pipes, water pipes, sewers, drains, conduits, or other structures which are uncovered by the excavation shall be carefully supported and protected from injury by the Contractor, and, in case of injury, they shall be restored by him, without compensation therefor, to as good condition as that in which they were found, and shall be kept in repair until 6 months after the completion of the work. The Contractor shall provide suitable temporary channels for water at all water courses. Wherever the work passes under or adjacent to street railway tracks, the Contractor shall make all necessary arrangements with the railway company for doing any work which may affect the property of the company or interfere with the operating of the railway, and he shall be liable for any damage that may be caused by any act, omission or neglect on his part, and shall pay all expenses of every kind incidental to this work.

Changing the Location of Existing Structures

3. Whenever it becomes necessary to change the location of any water or gas pipes, sewers, drains, conduits or other structures not otherwise provided for in these specifications, the Contractor shall do the whole or such portions of the work of making such changes as the Commissioner may require, and shall receive in payment therefor the reasonable cost of the work done as determined by the Commissioner plus 15 per cent of such cost. In estimating such cost, no allowance shall be made to the Contractor for the use of tools not especially provided for this work, for general superintendence, or for any overhead expenses except liability insurance.

ARTICLE 11

Co-operation with Other Contractors

The Contractor shall conduct the work in such manner as not to interfere with other work being done by the City, by contract or otherwise, and if deemed necessary by the Commissioner, the work under this contract shall conform to the progress of said other work; shall co-operate with other contractors or employees who may be doing work for the City, and with public service corporations affected by the work, in arranging for storage places, connections, bracings, temporary support for structures, repairs, etc.

ARTICLE 12

Subcontracts

1. The Contractor, in any contract with a Subcontractor, shall provide that the Subcontractor shall be subject to all specifications, terms, provisions, conditions, requirements and liabilities set forth in this contract so far as such specifications, terms, provisions, conditions, requirements and liabilities are applicable to the work to be done under such Subcontract, and shall also provide that such Subcontract shall be terminated by the Contractor whenever the Commissioner shall certify to him in writing that in his opinion the work of the Subcontractor is unnecessarily or unreasonably delayed or that the Subcontractor has violated any of the provisions of this contract. The Contractor shall at once terminate such subcontract if the Commissioner, after certifying as aforesaid, shall in writing direct the Contractor to make such termination.

2. Subcontracts shall be made in writing and the Contractor shall furnish the Commissioner with a copy of all Subcontracts on demand.

3. Pursuant to the provisions of M.G.L. Ch. 30, Sec. 39F (1), the following provisions are included in the General Conditions:

(a) Forthwith after the Contractor receives payment on account of a periodic estimate, the Contractor shall pay to each Subcontractor the amount paid for the labor performed and the materials furnished by that Subcontractor, less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the Subcontractor by the Contractor.

(b) Not later than the sixty-fifth day after each Subcontractor substantially completes his work in accordance with the plans and specifications, the entire balance due under the Subcontract less amounts retained by the City as the estimated

cost of completing the incomplete and unsatisfactory items of work, shall be due the Subcontractor; and the City shall pay that amount to the Contractor. The Contractor shall forthwith pay to the Subcontractor the full amount received from the City less any amount specified in any court proceedings barring the payment and also less any amount claimed due from the Subcontractor by the Contractor.

(c) Each payment made by the City to the Contractor pursuant to subparagraphs (a) and (b) of this paragraph for the labor performed and the materials furnished by a Subcontractor shall be made to the Contractor for the account of the Subcontractor; and the City shall take reasonable steps to compel the Contractor to make each such payment to each such Subcontractor. If the City has received a demand for direct payment from a Subcontractor for any amount which has already been included in a payment to the Contractor or which is to be included in a payment to the Contractor for payment to the Subcontractor as provided in subparagraphs (a) and (b), the City shall act upon the demand as provided in this section.

(d) If, within seventy days after the Subcontractor has substantially completed the Subcontract work, the Subcontractor has not received from the Contractor the balance due under the Subcontract including any amount due for extra labor and materials furnished to the Contractor, less any amount retained by the City, the demand shall be by a sworn statement delivered to or sent by certified mail to the City, and a copy shall be delivered to or sent by certified mail to the Contractor at the same time. The demand shall contain a detailed breakdown of the balance due under the Subcontract and also a statement of the status of the completion of the Subcontract work shall be valid even if delivered or mailed prior to the seventieth day after which the Subcontractor has substantially completed the Subcontract work. Within ten days after the Subcontractor has delivered or so mailed the demand to the City and delivered or so mailed a copy to the Contractor, the Contractor may reply to the demand. The reply shall be by a sworn statement delivered to or sent by certified mail to the City and a copy shall be delivered to or sent by certified mail to the Subcontractor at the same time. The reply shall contain a detailed breakdown of the balance due under the Subcontract including any amount due for extra labor and materials furnished to the Contractor and of the amount due for each claim made by the Contractor against the Subcontractor.

(e) Within fifteen days after receipt of the demand by the City, but in no event prior to the seventieth day after substantial completion of the Subcontract work, the City shall make direct payment to the Subcontractor of the balance due under the Subcontract including any amount due for extra labor and materials furnished to the Contractor, less any amount (i) retained by the City as the estimated cost of completing the incomplete or unsatisfactory items of work (ii) specified in any court proceedings barring such payment, or, (iii) if the reply shall not deduct from a direct payment any amount as provided in part (iii) if the reply is not sworn to, or for which the sworn reply does not contain the detailed breakdown required by subparagraph (d). The City shall make further direct payments to the Subcontractor forthwith after the removal of the basis for deductions from direct payments made as provided in parts (i) and (ii) of this subparagraph.

(f) The City shall forthwith deposit the amount deducted from a direct payment as provided in part (iii) of subparagraph (e) in an interest-bearing joint account in the names of the Contractor and the Subcontractor in a bank in Massachusetts selected by the City or agreed upon by the Contractor and the Subcontractor and shall notify the Contractor and the Subcontractor of the date of the deposit and the bank receiving the deposit. The bank shall pay the amount in the account, including accrued interest, as provided in an agreement between the Contractor and the Subcontractor or as determined by decree of a court of competent jurisdiction.

(g) All direct payments and all deductions from demands for direct payments deposited in an interest-bearing account or accounts in a bank pursuant to subparagraph (f) shall be made out of amounts payable to the Contractor at the time of receipt of a demand for direct payment from a Subcontractor and out of amounts which later become payable to the Contractor and in the order of receipt of such demands from Subcontractors. All direct payments shall discharge the obligation of the City to the Contractor to the extent of such payment.

(h) The City shall deduct from payments to a Contractor amounts which, together with deposits in interest-bearing accounts pursuant to subparagraph (f), are sufficient to satisfy all unpaid balances of demands for direct payment received from Subcontractors. All such amounts shall be earmarked for such direct payments, and the Subcontractors shall have a right in such deductions prior to any claims against such amounts by creditors of the Contractor.

ARTICLE 13

Responsibility for Work-Contractor's Responsibility

The Contractor has made his proposal from his own examinations and estimates, and shall not hold the City, its agents, or employees, responsible for or bound by, any schedule, estimate, sounding, boring, or any plan of any part of the

work; shall, if any error in any plan, drawing, specification or direction relating to anything to be done under the contract come to his knowledge, report it at once to the Commissioner; shall not, except as the Commissioner shall authorize in writing, assign or sublet any part of the contract except for the supply of materials and plant, or of anything to be done thereunder; shall, subject to the provisions of the contract take all responsibility of, and bear all losses resulting to him in carrying on the contract, and shall assume the defense of, and hold the City, its agents and employees harmless from all suits and claims against them, or any of them, arising from the use of any invention, patent or patent right, material, labor or implement, by or from any act or omission or neglect of the Contractor, his Subcontractor, his agents or employees, in carrying on the contract, or for any liability of any nature arising under the contract. The Contractor shall be solely responsible and liable for, and shall fully protect and indemnify the City against all claims for damages to persons or property occasioned by or resulting from blasting or other methods or processes in the work of construction, whether such damages be attributable to negligence of the Contractor, his employees or his Subcontractor or otherwise.

ARTICLE 14 LIGHTS--GUARDS

1. The Contractor shall assume all responsibilities of the work and take all proper precautions to protect persons and property from injury and unnecessary interference; leave a reasonably unobstructed way along public and private places for pedestrians, teams, and vehicles, and for access to hydrants; provide proper walks over or around any obstruction made in a public or private place in carrying on the contract, and maintain from the beginning of twilight through the whole of every night, on or near the obstruction sufficient lights and guards to protect travelers from injury thereby, and if, after one notification from the Commissioner that said lights and guards are not sufficient, the Contractor has not placed additional lights and guards to the satisfaction of the Commissioner, the Commissioner shall have the right to take charge of that part of the work at the expense of the Contractor. While the work is suspended he shall keep all roadways and sidewalks in proper condition, and when the work is completed put the place and vicinity in proper condition and so leave them.

2. The Contractor shall provide proper means of access to property where the existing access is cut off by the Contractor and replace or put in good condition every conduit, catch-basin, tree, wall, fence, or other thing injured by the Contractor in carrying on the contract, unless the same has been permanently done away with, on approval of the Commissioner, as being necessary to the proper carrying on of the contract.

ARTICLE 15 Guaranty

1. Any settlement or other defect, or the failure of any part of the structure or the work due to defective materials or workmanship, that occurs within one year after the work is completed, is to be immediately repaired by the Contractor. In the event of any such settlement, defect, or failure causing liability to the City for damage to persons or property, the Contractor does by this clause agree to hold the City harmless and to assume the defense of any claims therefor.

2. Responsibility under this guaranty for the adequacy of the work does not relieve the Contractor of his obligation to comply with the terms of the contract and to conform to all the requirements of the plans and specifications, nor does it give him the right to deviate in any way from the details of design of the structure or the work.

ARTICLE 16 Defective Work and Materials

The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill his contract as herein described, and defective work shall be made good and unsuitable materials may be rejected, notwithstanding that such work and materials have been previously overlooked by the Engineer and accepted or estimated for payment. If the work or materials, or any part thereof shall be found defective at any time before the final acceptance of the whole work, the Contractor shall forthwith make good such defect in a manner satisfactory to the Engineer, and if any material brought upon the ground for use in the work or selected for the same, shall be condemned by the Engineer as unsuitable or not in conformity with the specifications, the Contractor shall forthwith remove such materials from the vicinity of the work. Nothing in this contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the work or the soil, but all materials shall, upon being so attached or affixed, become the property of the City.

ARTICLE 17
Employment of Labor

The Contractor shall give preference in employment, first to citizens of Massachusetts, second, to other citizens of the United States; and shall allow all employees on said work to lodge, board and trade where they choose, and shall not obstruct any other person in doing work for the City; and shall conform to all labor laws of the Commonwealth; and no laborer or teamster, workman or mechanic working within this Commonwealth in the employ of the Contractor or Subcontractor or other person doing or contracting to do the whole or a part of the work contemplated by the Contractor shall be requested to, or required to, or work more than eight hours in any one calendar day. This contract is subject to all the laws of the Commonwealth, and ordinances of the City and if any clause thereof does not conform to such laws and ordinances, such clause shall be void and such laws and ordinances operated in lieu thereof.

ARTICLE 18
Laws and Regulations - Contractor to Comply with Law

The Contractor shall keep fully informed of all existing or future acts of the legislature, and of all municipal ordinances, prohibitions, rules and regulations in any manner affecting the conduct of the work, and of all orders or decrees of any body or tribunal having any jurisdiction or authority over the materials, times, places and actions of those employed in the work embraced in the contract. The Contractor shall at all times observe and comply with all existing and future acts, ordinances, prohibitions, rules, regulations, orders and decrees; and shall protect and indemnify the city and its employees against any and all claims arising from or based on any violation of such acts, ordinances, prohibitions, rules, regulations, orders or decrees, and against all violations of law by the Contractor or his agents or employees.

END OF SECTION

The Contractor shall insert prices for each item in ink, in both words and figures, and is to show a total bid price. In the event a discrepancy between the written words and figures, the written words shall govern. In the event an error in the bidders total bid price, the corrected total bid obtained by the summation of the products of the unit prices multiplied by the respective quantities shall stand as the bidder's total bid price.

The Contractor is required to review any related plans, conduct a full site review, and read all the provisions in the document before inserting prices, and is further advised to make his own determination as to the accuracy of the estimated quantities before inserting bid prices.

The estimated quantities shown here are based solely upon a reasonable assessment of the project parameters, thus the Contractor is advised that the actual quantities may vary substantially as field conditions may necessitate. Whatever the actual quantities, however, the unit prices stated shall be no higher than those stated below.

NOTICE: In accordance with MGL Chapter 303 of the Acts of 2008 this bid contains price adjustments for (1) Fuel (combination of Gasoline & Diesel) and (2) Liquid Asphalt. It is the bidder's responsibility to familiarize themselves with these price adjustment programs prior to entering a bid.

ITEM DESCRIPTION & BID PRICE	QUANTITY	UNIT	TOTAL COST
<p>Item: 0.303FC - FUEL COSTS*</p> <ul style="list-style-type: none"> * Bidder's may elect NOT to bid the cost of fuel(s) separately by inserting the term N/A (i.e. <i>Not Applicable</i>) in all <u>entry lines</u> of this Item .303FC. This is a mandatory requirement to verify the Contractor has waived their option to bid the cost of fuel(s) separately and has instead elected to factor their <u>collective fuel costs for the overlay operations</u> into the bid price of 10, 16.1, 16.2 and 20 Contractor's choosing to bid this line item must NOT include the cost of fuel in 10, 16.1, 16.2 and 20 <p>-----</p> <p>For a bid to be considered responsive under this item the Contractor MUST supply the following information:</p> <p>Address of Batching Plant: _____</p> <p>_____</p> <p>The One –Way shortest distance listed by MapQuest (www.mapquest.com) from the batching plant to Newton City Hall, 1000 Commonwealth Ave., Newton Centre, MA 02459 _____ Miles</p> <p><i>The City of Newton reserves the right to validate this information before and after awarding the bid.</i></p> <p>0.303FC = total combined number of gallons of Fuel (Diesel & Gasoline) to supply, deliver & install <u>One Ton</u> of Bituminous Concrete:</p> <p>(IN WORDS) _____ Gallons Per Ton</p> <p>(IN FIGURES) _____ Gallons Per Ton</p> <p>(_____ Gallons per Ton) x (\$ <u>1.9445</u> /Gallon)</p> <p style="text-align: center;">^ Base Price^</p> <p style="text-align: center;">of diesel and gasoline= (BPF)</p>	4150	One Ton of Bituminous Concrete	<p>Note: This factored value is for the Comparison of Bids Only. (See Spec. Prov.)</p> <p>\$ _____</p>

ITEM DESCRIPTION & BID PRICE	QUANTITY	UNIT	TOTAL COST
<i>Per Mass Highway</i>			
<p>Item: 0.303LA- DIFFERENTIAL FOR LIQUID ASPHALT</p> <p>(Informational Note: For the purpose of this program One (1) Ton of Type I-1 Bituminous Concrete shall contain six-hundredths (. 06) Ton of Liquid Asphalt)</p> <p>The Base Price for Liquid Asphalt is:</p> <p>\$ <u>580.00</u> Per Ton of Liquid Asphalt</p> <p><u>^Base Price of Liquid Asphalt (BPLA)^</u> Per Mass Highway</p>	N/A	N/A	<p>The Base Price (BPLA) shown here shall be used to determine the monthly price differential (See Spec. Prov.)</p> <p>N/A</p>
<p>ITEM: 1 - MOBILIZATION (INCLUDING SURVEY SERVICES, VIDEO SERVICES & UTILITY COMPANY COORDINATION)</p> <p>THE SUM OF: _____ DOLLARS</p> <p>AND _____ CENTS</p> <p>(\$ _____) PER LUMP SUM</p>	1	LS.	\$ _____
<p>ITEM: 2 - FURNISH AND MOUNT SAFETY SIGNING (INCLUDING POSTS)</p> <p>THE SUM OF: _____ DOLLARS</p> <p>AND _____ CENTS</p> <p>(\$ _____) PER SQUARE FEET</p>	1000	S.F.	\$ _____
<p>ITEM: 3 - SAFETY CONTROLS AND DEVICES FOR CONSTRUCTION OPERATIONS</p> <p>THE SUM OF: _____ DOLLARS</p> <p>AND _____ CENTS</p> <p>(\$ _____) PER DRUM DAY</p>	6000	D.D.	\$ _____
<p>ITEM: 4 – ELECTRONIC VARIABLE MESSAGE SIGNBOARD(S)</p> <p>THE SUM OF: _____ DOLLARS</p> <p>AND _____ CENTS</p> <p>(\$ _____) PER DAY</p>	250	DAYS	\$ _____

ITEM DESCRIPTION & BID PRICE	QUANTITY	UNIT	TOTAL COST
<p>ITEM: 5 - MANUFACTURED CATCH BASIN SEDIMENTATION PROTECTION</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER EACH</p>	40	EACH	\$ _____
<p>ITEM: 6 – SAWCUT OF EXISTING REINFORCED CONCRETE ROADWAY (PERIMETER OF EXCAVATION AREAS ONLY)</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER LINEAR FOOT</p>	1200	L.F.	\$ _____
<p>ITEM: 7 – SAWCUT OF EXISTING BIT. CONC. CONCRETE ROADWAY</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER LINEAR FOOT</p>	18,500	L.F.	\$ _____
<p>ITEM: 8.1 – EXCAVATE AND DISPOSE OF CONCRETE ROADWAYS</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER CUBIC YARD</p>	200	C.Y.	\$ _____
<p>ITEM: 8.2 – EXCAVATE AND DISPOSE OF BITUMINOUS CONCRETE (SHOULDERS, INTERSECTIONS AND PROJECT LIMITS)</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER SQUARE YARD</p>	6600	S.Y.	\$ _____

ITEM DESCRIPTION & BID PRICE	QUANTITY	UNIT	TOTAL COST
<p>ITEM: 8.3 - EXCAVATE AND DISPOSE OF BITUMINOS CONCRETE UTILITY TRENCH (AS DIRECTED BY THE ENGINEER)</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER SQUARE YARD</p>	400	S.Y.	\$ _____
<p>ITEM: 9 – FURNISH AND PLACE DENSE GRADED CRUSHED STONE</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER CUBIC YARD</p>	400	C.Y.	\$ _____
<p>ITEM: 10 – FURNISH AND INSTALL BIT. CONC. BASE COURSE, TYPE I-1 (SHOULDERS, INTERSECTIONS,TRENCH PATCHES & PROJECT LIMITS)</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER TON</p>	1600	TONS	\$ _____
<p>ITEM: 11 – CLEAN AND PREPARE SPALLED SECTIONS CONCRETE ROADWAY AND RESTORE WITH HYDRAULIC CEMENTS</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER SQUARE FEET</p>	700	S.F.	\$ _____
<p>ITEM: 12 – CLEAN EXISTING JOINTS(LONGITUDINAL & TRANSVERSE) IN CEMENT CONCRETE PAVEMENT</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER LINEAR FEET</p>	9200	L.F.	\$ _____

ITEM DESCRIPTION & BID PRICE	QUANTITY	UNIT	TOTAL COST
<p>ITEM: 13 – CLEAN VARIABLE WIDTH CRACKS IN CEMENT PAVEMENT</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER LINEAR FEET</p>	1600	L.F.	\$ _____
<p>ITEM: 14 – SEAL JOINTS AND CRACKS WITH FIBER REINFORCED SEALANT</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER GALLON</p>	2100	GAL	\$ _____
<p>ITEM: 15 – EMULSIFIED TACK COAT FOR LEVEL COURSE AND FINAL OVERLAY INSTALLATION</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER GALLON</p>	2100	GAL	\$ _____
<p>ITEM: 16.1 – FURNISH AND INSTALL LEVEL COURSES OF BIT. CONCRETE TYPE I-1</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER TON</p>	400	TONS	\$ _____
<p>ITEM: 16.2 – FURNISH AND INSTALL BIT. CONC. “SAND MIX” FOR FEATHERING THE EDGES OF THE TOP TIER LEVEL COURSE</p> <p>THE SUM OF: _____ DOLLARS AND _____ CENTS</p> <p>(\$ _____) PER TON</p>	75	TONS	\$ _____

ITEM DESCRIPTION & BID PRICE	QUANTITY	UNIT	TOTAL COST
<p>ITEM: 17 – ADJUST EXISTING MANHOLES AND CATCH BASINS</p> <p>THE SUM OF:</p> <p>_____ DOLLARS</p> <p>AND _____ CENTS</p> <p>(\$ _____) PER EACH</p>	70	EACH	\$ _____
<p>ITEM: 18 – ADJUST EXISTING GATE BOXES</p> <p>THE SUM OF:</p> <p>_____ DOLLARS</p> <p>AND _____ CENTS</p> <p>(\$ _____) PER EACH</p>	30	EACH	\$ _____
<p>ITEM: 19 – FURNISH AND INSTALL NON WOVEN SELF ADHISIVE, ASPHALT IMPREGNATED GEOTEXTILE PABING FABRIC</p> <p>THE SUM OF:</p> <p>_____ DOLLARS</p> <p>AND _____ CENTS</p> <p>(\$ _____) PER LINEAR FOOT</p>	18,000	L.F.	\$ _____
<p>ITEM: 20 – FURNISH AND INSTALL ONE & A HALF (1.5) BIT. CONC. TYPE I-1 OVERLAY</p> <p>THE SUM OF:</p> <p>_____ DOLLARS</p> <p>AND _____ CENTS</p> <p>(\$ _____) PER TON</p>	2300	TONS	\$ _____
<p>ITEM: 21 – RETRIEVE AND DEPLOY A CITY OWNED(GATE BOX OR MANHOLE) PROTECTOR RING</p> <p>THE SUM OF:</p> <p>_____ DOLLARS</p> <p>AND _____ CENTS</p> <p>(\$ _____) PER EACH</p>	110	EACH	\$ _____

ITEM DESCRIPTION & BID PRICE	QUANTITY	UNIT	TOTAL COST
ITEM: 22 – REMOVE AND STOCKPILE(CITY OWNED) MANHOLE PROTECTOR RINGS THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____) PER EACH	110	EACH	\$ _____
ITEM: 23 – MISCELLANEOUS WORK ALLOWANCE (ENGINEER DISCRETION) THE SUM OF: FORTY THOUSAND _____ DOLLARS AND ZERO _____ CENTS (\$40,000) PER ALLOWANCE	1	ALL.	\$ 40,000
ITEM: 24 – POLICE OFFICERS THE SUM OF: EIGHTY THOUSAND _____ DOLLARS AND ZERO _____ CENTS (\$80,000) PER ALLOWANCE	1	ALL.	\$ 80,000

TOTAL BID PRICE : \$ _____

The total bid amount must be placed in paragraph “C” of the bid form.

END OF SECTION

DRAWINGS

DRAWINGS MUST BE OBTAINED THROUGH THE PURCHASING DEPARTMENT, HOWEVER THE CONTRACTOR IS ADVISED TO CALL AHEAD TO ENSURE THAT A COMPLETE SET OF DRAWINGS IS READILY AVAILABLE (617-796-1220).

SECTION 0. 303

Item: 0.303FC - FUEL COSTS*

Description

*** The Contractor may elect NOT to bid the cost of fuels separately by inserting the term N/A (i.e. *Not Applicable*) in all entry lines of Item 0.303FC on the appropriate Item Sheet. This is a mandatory requirement to verify that the Contractor has formally waived their option to bid the cost of fuel(s) separately and has instead elected to factor the round-trip supply, delivery & installation fuel costs into the bid price of Items 10, 16.1, 16.2 and 21.**

- (a) Under this item the Contractor shall be paid for all the fuel(s) consumed in the performance of this contract.
- (b) The intent of this program is to maintain a reasonable and continuous parity with the regional fluctuations that may occur in the cost of petroleum based fuel products. It is important to note that due to the numerous types of; fuel, equipment, vehicles, programs, and efficiency factors related to each of these operational elements and therefore unique to the Contractor's own enterprises, that any fuel adjustments made under this item are intended only to defray and offset extraordinary market trends in petroleum based fuel products.
- (c) **IMPORTANT NOTE: An adjustment to the cost of fuels may result in an increase of payment if the fuel market has trended upward, or it may otherwise result in a decrease of payment if the fuel market has trended downward.**
- (d) The City of Newton reserves the right, before awarding the Contract, to request from the Contractor a tabulated accounting of the means and methods upon which the number of gallons bid by the Contractor was derived. The intent of this evaluation is to preserve the fairness of this program by preventing bidders from placing an imbalanced bid that may ultimately cause excessive financial impact to either party. These tabulations will include, but shall not be limited to, an accounting of all **transport and installation** equipment and their associated manufacturers fuel consumption rates which the Contractor/supplier intends to use to complete the work under this contract. In the event the City of Newton, subsequent to performing an analysis, determines that the Contractor's bid, with regard to the consumption of fuel per round trip for the **supply, delivery and installation of the bituminous concrete, is excessive for the type transport equipment** traditionally deployed for this type of work then **the City of Newton reserves the right to waive any informalities in any or all bids, or to reject any or all bids, if it be in the public interest to do so.**
- (e) The Contractor shall also incorporate into their bid the amounts of fuel required for any work performed by their subcontractors or by their vendors.

Method of Administration

- (f) In accordance with Chapter 303 Acts of 2008, the City of Newton shall use the most current 'new' pricing of Diesel and Gasoline fuel as they are indicated on the Mass Highway web site at the time of advertisement.

<http://www.mhd.state.ma.us/default.asp?pgid=content/fuelPrices&sid=about#para24>

The **average** of these two values (Diesel & Gasoline) shall serve as the value basis for determining the **Base Price** of Fuel (BPF) at the time of the advertisement. Subsequently, during the course of the contract, the **Period Price** of Fuel (PPF) shall be determined in the same manner, but at the end of each calendar month, and if the **averaged** Period Price (PPF) has either increased or decreased by more than five percentage points (5%) relative to the **averaged** Base Price of Fuel (BPF), then the cost of fuel(s) for the applicable calendar month shall be paid for at the adjusted rate, otherwise the cost of fuel(s) for the applicable calendar month shall be paid for at the initial Base Price of Fuels.

The Contractor is advised to verify these value standards and citations prior to placing their bid.

Method of Administration

(g) When a cost adjustment is applied it shall be inclusive of the five (5%) variation.

(h) Payments for fuel shall be calculated at the end of **each calendar month** and they shall be based upon the acceptable **number of tons of bituminous concrete supplied, delivered and installed** within that particular (applicable) calendar month in which the work was performed, **inclusive of the tack coat application. (Program Note: In the event a continuous paving operation spans several days but the delivery & discharge of the bituminous concrete is performed in two separate months, then two separate fuel payments shall be made).**

(i) Immediately upon delivery of any bituminous concrete product, the Contractor shall furnish the Engineer with a computer generated invoice that has been issued directly by the bituminous concrete batching plant. The invoice shall clearly show the **tare weight, type of bituminous concrete and the date of delivery** for each load of bituminous concrete which is ultimately delivered and discharged. The plant issued tare/weight slips are to bear the name of the Contractor and Vendor and shall **be surrendered to the DPW Agent-In-Charge immediately upon the delivery of the material. The City will have no obligation to pay for any errant invoice slips which are forwarded after the delivery vehicle has exited the project site.**

(j) **No upward fuel adjustment will be made for any delivery and/or installation related activity which takes place beyond the completion date of the contract** unless the Contractor's work has been delayed due to no fault of their own (i.e. Preparation work that must be performed by others before the Contractor can complete their own tasks in the contractually allotted time.) Any such delay must be brought to the attention of the DPW Agent-In-Charge in a timely manner at which time the Agent shall investigate, verify, and document the extenuating circumstances and inform the Contractor of their decision.

Method of Payment

(k) Payment formula:

BPF = The Base Price of Fuel on the bid release date (Averaged cost of Diesel & Gasoline in \$/Gallon)

PPF = The Period Price of Fuel for the applicable calendar month (Averaged cost of Diesel & Gasoline in \$/Gallon)

G = Gallons of fuel bid by the Contractor to Supply, Deliver & Install One (1) Ton of Bit. Conc. W/tack coat
(Gallons Bid for All Services)

T = The total number of Tons of Type I-1 Bit. Conc. Supplied, Delivered & Installed in the applicable calendar month

If the (PPF) does not exceed +/- 5% relative to the (BPF) then: (BPF) x G x T = Fuel Payment (\$)

If the (PPF) does exceed +/- 5% relative to the (BPF) then: (PPF) x G x T = Fuel Payment (\$)

Basis of Payment

*** The Contractor may elect NOT to bid the cost of fuels separately by inserting the term N/A (i.e. Not Applicable) in all entry lines of Item 0.303FC on the appropriate Item Sheet. This is a mandatory requirement to verify that the Contractor has formally waived their option to bid the cost of fuel(s) separately and has instead elected to factor the round-trip supply, delivery & installation fuel costs into the bid price of Items 16.1, 16.2 and 21.**

(l) **The round trip cost of fuel(s) consumed for the delivery, and discharge and installation of one ton of bituminous concrete**, inclusive of work associated with the removal and stockpiling of manhole protector rings, shall be paid for under **Item 0.303FC (unless waived)**. The cost of fuel used to complete the work under this contract shall be made in accordance with the applicable Period Price for Diesel & Gasoline fuels as posted for each calendar month in which the work was performed, **inclusive of tack coat**, and as specified herein.

(m) The Contractor shall be responsible for disbursing fuel cost payments to their subcontractors and/or to their vendors.

(n) No payment shall be made for any fuel(s) consumed to remedy and/or to replace any deficient material supplied by the Contractor, subcontractors and/or their vendors.

SECTION 0. 303

Item: 0.303LA - DIFFERENTIAL FOR LIQUID ASPHALT

Description

(a) Under this item a differential value shall be calculated and applied to the payment on a monthly basis. The differential value shall be based upon the amount of Liquid Asphalt contained in the total tare weight of bituminous concrete supplied, delivered and installed in each respective calendar month.

(b) **Item 0. 303LA** is to provide a structured means, whereby the cost of the Liquid Asphalt **contained in Type I-1 bituminous concrete** is evaluated each calendar month, and under certain market conditions this value is adjusted **either upward or downwards** to maintain a reasonable and continuous parity with the regional fluctuations that may occur in the price of this commodity.

(c) **IMPORTANT NOTE: An adjustment to the cost of the Liquid Asphalt component may result in an increase of payment if the market has trended upward, or it may otherwise result in a decrease of payment if the market for Liquid Asphalt has trended downward. Further, these adjustments do not compensate the Contractor for the entire cost of the bituminous concrete products consumed in the execution of this contract but only for the monthly differential value(s) which may occur with regard to the Liquid Asphalt component.**

Method of Administration

(d) In accordance with Chapter 303 Acts of 2008 the City of Newton shall use the most current ‘new’ pricing for **Liquid Asphalt** as indicated on the Mass Highway web site at the time of advertisement.

<http://www.massdot.state.ma.us/highway/DoingBusinessWithUs/Construction/PriceAdjustments.aspx>

The value at the time of advertisement shall serve as the Base Price of Liquid Asphalt (BPLA). Subsequently, and during the course of the contract, the Period Price of the Liquid Asphalt (PPLA) component shall be determined in the same manner and at the end of each respective calendar month, and if the Period Price (PPLA) has either increased or decreased by more than five percentage points (5%) relative to the Base Price (BPLA) index, then the differential cost of the Liquid Asphalt component shall be paid for at the adjusted rate, otherwise no adjustment shall be made.

The Contractor is advised to verify these value standards and citations prior to placing their bid.

(e) The differential value for the Liquid Asphalt component shall be calculated at the end of each calendar month and it shall be based upon the number of acceptable tons of bituminous concrete supplied, delivered and installed within that particular calendar month. This value shall be derived by applying a fixed factor to the tonnage of Liquid Asphalt that is contained in a single ton of Type I-1 bituminous concrete top mix. **(Program Note: In the event a continuous**

delivery & paving operation spans several days but is performed in two separate months, then two separate Liquid Asphalt calculations shall be made.)

- (f) When a cost differential is applied it shall be inclusive of the five (5%) variation.
- (g) Immediately upon delivery of any bituminous concrete product, the Contractor shall furnish the Engineer with a computer generated invoice that has been issued directly by the bituminous concrete batching plant. The invoice shall clearly show the **tare weight, type of bituminous concrete and the date of delivery** for each load of bituminous concrete which is ultimately delivered and discharged. The plant issued tare/weight slips are to bear the name of the vendor and shall **be surrendered to the DPW Agent-In-Charge immediately upon the delivery of the material. The City will have no obligation to pay for any errant slips which are forwarded after the delivery vehicle has exited the project site.**

Method of Administration (Continued)

(h) **No upward Liquid Asphalt component adjustment will be made for any delivery and discharge which takes place beyond the completion date of the contract** unless the Contractor's work has been delayed due to no fault of their own (i.e. Preparation work that must be performed by others before the Contractor can complete their own tasks in the contractually allotted time.) Any such delay must be brought to the attention of the DPW Agent-In-Charge in a timely manner at which time the Agent shall investigate, verify, and document the extenuating circumstances and inform the Contractor of their decision.

Method of Payment

(i) Payment formula:

BPLA = The Base Price Liquid Asphalt Cost Index on the bid release date (\$/Ton of Liquid Asphalt)

PPLA = The Period Price for One Ton of Liquid Asphalt for the applicable calendar month in which it was delivered (\$/Ton of Liquid Asphalt)

TBC = Total tare Tons of bituminous concrete delivered & discharged in the applicable calendar month (Tons)

. 06 = **Tons of Liquid Asphalt contained in One (1) Ton Type I-1 bituminous concrete**
(120 lbs. Liquid Asphalt/Ton Bit. Conc. = **.06** Tons Liquid Asphalt/Ton Bit. Conc.)

If the (PPLA) does not exceed +/- 5% relative to the (BPLA) then: No differential adjustment.

If the (PPLA) exceeds +/- 5% relative to the (BPLA) then:

(PPLA - BPLA) x TBC x .06 = Differential Value for Current Pay Period (\$)

Basis of Payment

(j) Under **Item 0.303LA** the differential value for **Liquid Asphalt contained in One (1) Ton of Type I-1 bituminous concrete** used to complete the work under this contract shall be made in accordance with the Period Price index values for Liquid Asphalt posted for each calendar month in which the work was performed and relative to the Base Price as specified herein. Subsequently these values shall be factored in accordance with the above-noted formula (Par. i).

(k) **The differential value for Liquid Asphalt shall be based upon a fixed mean value of six-hundredths (. 06)Ton Liquid Asphalt contained in One (1) Ton of Type I-1 bituminous Concrete, with said value differential being factored only on the number of Tons of Bituminous Concrete actually used, verified and/or accepted by the Engineer.**

(l) No adjustment shall be made for any material which is rejected or is deemed to be of an inferior quality. Nor shall any adjustment be made for Liquid Asphalt contained in any **bituminous concrete** material which is used to remedy any deficient work which was initially performed by the Contractor and/or vendor under this contract, and which is proven to be deficient and/or of inferior quality during and/or subsequent to discharge.

(m) The Contractor shall be responsible for disbursing the Liquid Asphalt cost adjustments to their subcontractors and/or to their vendors.

SECTION 1

ITEM 1 – MOBILIZATION (INCLUDING SURVEY SERVICES, VIDEO SERVICES, NOTIFICATIONS, SCHEDULING & UTILITY COMPANY COORDINATION)

Description

The Contractor shall employ a Massachusetts Registered Land Surveyor who shall be responsible for providing, and directing, all survey, layout, location and investigative services throughout the entire course of the project.

The Contractor is to make a video tape and/or photographic record of all existing sideline conditions, prior to the commencement of construction activities, and/or as may be required as the construction activities commence, for the purpose of documenting all decrepit, and/or extraordinary points of concern. This task shall be complete with a representative from the Engineering Division.

The Contractor is to coordinate and make accommodations for all work performed on private property in the execution of this contract, and is to further coordinate, arrange and/or make accommodations for the performance of all second party utility work which may be required in order to complete the work required under this contract.

The contractor is hereby notified that any work being performed adjacent to private property may have an existing irrigation system. It is the contractor's responsibility to identify any and all irrigation systems and take the upmost care not to damage said system. If any system is damaged by the contractor, it shall be the contractor's responsibility to repair the system within five (5) business days. All repair work shall be considered incidental to the project.

The contractor shall not disturb any granite bounds within the project limits. If at any time the contractor does disturb a granite bound (horizontally or vertically) the contractor shall reset the bound. The bound shall be certified by a Massachusetts Registered Land Surveyor prior to acceptance by the City of Newton. This shall be considered incidental to the project.

The Contractor is primarily responsible for the scheduling and coordination of all Police services under this item, however the actual cost of Police Services will be paid for under the appropriate item in this contract.

The contractor shall be responsible for all utility company coordination required to timely schedule the applicable utility to complete the work required to adjust castings which are owned by said utility.

"Equality" - An item equal to that named or described in these specifications of the contract may be furnished by the Vendor and the naming of any commercial name, trademark or other identification shall not be

construed to exclude any item or manufacturer not mentioned by name or as limiting competition but shall establish a standard of equality only. An item shall be considered equal to the item so named or described if (1) it is at least equal in quality, durability, appearance, strength and design; (2) it will perform at least equally the function imposed by the general design for the work being contracted for or the material being purchased; and (3) it conforms substantially, even with deviations, to the detailed requirements for the item in the specifications. The name and identification of all materials other than the one specifically named shall be submitted to the City in writing for approval, at time of bid, use or fabrication of such items. Subject to the provisions of M.G.L., Ch. 30, Sec. 39J, approval shall be at the sole discretion of the City, shall be in writing to be effective, and the decision of the City shall be final. The City may require tests of all materials so submitted to establish quality standards at the Vendor's expense. All directions, specifications and recommendations by manufacturers for installation, handling, storing, adjustment and operation of their equipment shall be complied with; responsibility for proper performance shall continue to rest with the Vendor.

Method of Compliance

Under the direction of a Massachusetts Professional Land Surveyor (PLS) the Contractor shall perform an existing conditions survey of Lowell Avenue and Centre Street within the project limits. This existing conditions survey shall consist of locating all joints and seams within the existing roadway curb to curb within the project limits. This survey shall be on the City of Newton base for vertical control. The contractor shall be responsible to reestablish the location of all joints and seams within the roadway for the purpose of sawcutting and joint filling after final paving.

The contractor shall establish and maintain temporary benchmarks for both horizontal and vertical controls for the duration of the project. The contractor shall be able to reestablish the location of any existing condition in the survey at any time during the duration of the project.

Under the direction of a Massachusetts Professional Land Surveyor (PLS) the Contractor shall extract, correlate, and subsequently post the design grades shown on the plan and/or as otherwise shown on the associated contract drawings.

The grade points shall be posted all along the roadway corridor on sturdy colorized four foot (4') high iron pins and/or stakes such that the final roadway, once completed, fully complies with the design scheme and/or with any modification necessitated by field changes ordered by the Engineer. However, the posting of grades shall not be limited to just the design grades but shall also include the interpolation and posting of intermediate grades and/or the re-posting of certain grades, as may be from time to time required by any interested party in order to successfully investigate and/or otherwise install, to the satisfaction of the Engineer, any drainage, curbing, pavement and/or any other grade dependent project related component or grade dependent issue.

The Contractor shall coordinate the grading and layout activities with the Engineer to ensure that the design grades are posted in an expeditious and acceptable manner. To that end the Contractor shall supply and install, at all critical grade points identified on the plan (and/or profile), as many sturdy pins and/or stakes as he deems necessary, or as otherwise may be required by the Engineer. The pins and/or stakes, once set, shall be clearly marked with paint and flagging such that their physical location, as well as the posted grades, can be easily seen by the general public and by the field personnel. Subsequently, once the pins and/or stakes have served their purpose, they shall be immediately removed by the Contractor.

The Contractor is to make a videotape and/or photographic record of all existing sideline

conditions prior to the commencement of construction activities, or as otherwise may become necessary as the construction activities commence, for the purpose of documenting all decrepit, and/or extraordinary points of concern or interest. This video record shall be made by the Contractor and a copy, or a secondary video tape, shall be delivered to the Engineer. Further, this inspection shall be witnessed by a representative from the Engineering Division.

The Contractor may opt to make a photographic record in lieu of a videotape but only to supplement the pre-construction sideline video survey, and only when a photographic record is deemed necessary and sufficient by the Engineer and/or the Contractor.

Videos and/or photographs are to be taken and delivered to the Engineer in such a manner that the subject matter can be clearly seen, and in such a timely manner that the collected information is not lost. The video shall be made on foot via a hand-carried camera.

The Contractor is to give ample notice prior to performing certain extraordinary construction related activities on private lands (i.e walls, steps etc.), and/or is to discuss, and/or is to make safe and reasonable accommodation of access, for all private property abutters affected by the scheduled construction activities at hand. In certain cases the Contractor will be further required to make special accommodations for the handicapped or for other physically challenged or sensor impaired individuals who live in or about the construction area so that their needs may be appropriately addressed. Notice of intent to construct or to disturb private property and/or access routes shall be made at least twenty four (24) hours in advance of the scheduled activity and/or as directed by the Engineer.

This notification shall be made in writing on a format acceptable to the Engineer should the Contractor be directed to do so, with said notices being posted at the subject address in a location nearest to the regular mail delivery location but not in the actual mailbox. The decision to post notices will be at the discretion of the Engineer in the field. Said notices shall be made on a brightly colored (yellow, orange etc.) 8.5" x 11" pieces of paper.

The Contractor shall make contact with all applicable utility companies in advance of commencement of work such that the utility companies can be logically scheduled within the overall construction schedule so that they will be on-site after the level courses of pavement have been laid. During the time in which the site will be occupied by utility company crews, the Contractor is not to be completing work on site. The intent of this order is to maintain vehicular access to the road to the largest extent practicable.

THE CONTRACTOR SHALL BEGIN WORK ON CENTRE STREET AND LOWELL AVENUE ON OR AROUND JUNE 25TH, 2015 AND SHALL BE VERIFIED WITH THE CITY ENGINEER PRIOR TO COMMENCEMENT. WORK SHALL BE COMPLETE ON BOTH CENTRE STREET AND LOWELL AVENUE BY SEPTEMBER 1ST, 2015.

Basis of Payment

Under Item 1 the Contractor will be paid the lump sum price for all labor and materials which will be required to complete these tasks throughout the entire term of the project. **Under this item the Engineer shall make such proportional payments as he deems appropriate throughout the course of this contract based upon a reasonable percentage for the value of services rendered to date.**

The total cost for this item shall not exceed 5% of the total contract cost in its entirety, inclusive of amendments as applicable, exclusive of this item. **Failure to observe this requirement MAY result in rejection of this bid.**

SECTION 1

ITEM 2 – FURNISH & MOUNT SAFETY SIGNS (INCLUDING POSTS)

Description

Seven days prior to the commencement of work the Contractor shall establish safety and specialty signboards with posts, as directed by the Engineer, and/or as described on page 66 of the City of Newton “General Constructions Details Revised Through March 2003” and/or as shown on the plans and/or as otherwise may be required. However, the Contractor is not to order any signboards until he has coordinated this effort with the Engineer in order to identify the maximum number, and various types of signboards that should be contained in the initial sign making order as every new signboard, once delivered, is to be reused. The Contractor is to order new signboards as the Engineer may further direct as the construction activities progress, however, no payment will be made for any new signboards which are damaged or lost. Damaged or lost signs are to be replaced at the Contractors own expense.

Signboards and posts are to be the first mobilization element to be established throughout the project zone before any other construction activities take place.

Specialty signboards, bearing unique messages, shall be fabricated by special order of the Engineer to address any and all site specific informational requirements.

Once established, all signboards and/or post systems are to be maintained for the duration of the construction activities. Any damaged signboards and/or post systems are to be immediately replaced at the Contractors own expense without any additional compensation.

Materials

Plywood signboards panels shall be fabricated from $\frac{3}{4}$ ” thick Medium Density Overlaid (MDO) Exterior Type, A-B both sides in natural color and the whole conforming with the requirements and tests for the above as set forth in U.S. Products Standards PSI-74 for Construction and Industrial Plywood. All plywood shall bear the grade trademark of an approved testing agency. The entire area of the signs shall be reflectorized with the reflective sheeting conforming to Section M9.30.0 of the Commonwealth of Massachusetts, Standard Specification for Highway and Bridges, latest edition. All applicable portions of Sections 828 and 840 of the aforementioned specifications shall also apply.

Posts shall be constructed of sturdy material(s) and adequately installed so as to withstand seventy-five mile an hour sustained winds when the respective sign is mounted in place. No payment will be made for posts, and/or support systems, which do not clearly meet this criteria. No additional payment will be made to replace any damaged post systems.

Method of Construction

All signboards shall be fastened in the manner described in the Construction Details, and/or as shown on the plans, or as directed by the Engineer.

SECTION 1

Method of Construction (cont.)

The Contractor shall be responsible for maintaining all signboards and posts for the duration of the contract and all signs and/or posts damaged or lost during construction shall be replaced by the Contractor at his own expense. Upon completion of the Contract, all safety and specialty signboards shall become the property of the City of Newton. Signboards shall be delivered by the Contractor to a City location designated by the Engineer, where the Contractor is to neatly stockpile the signboards (exclusive of the posts).

The City reserves the right to limit the number of signs it receives, and to further pick and choose which signs are to be delivered to the City of Newton. In the event the City has no desire to take control of the signs, then the Contractor is to dispose of them as he so chooses, however, in no case is any sign to be discarded in this manner until such time as the Engineer authorizes its release.

Method of Measurement

Under Item 2, measurement for the payment of signboards with posts shall be by the square foot of surface area for each new and professionally made signboard. No additional payment will be made for field made signboards which are ordered by the Engineer and which bear a temporary hand-written message.

Basis of Payment

Under Item 2 the Contractor will be paid the contract unit price per square foot for each new professionally made safety and specialty signboard authorized and/or approved by the Engineer, complete in place, inclusive of the post system(s).

Under this item signboards are to be furnished, complete in place, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item, as shown on the plans, as directed by the Engineer and as specified herein.

No additional payment will be made for signs and/or signposts which, subsequently replace previously established units.

ITEM 3 – SAFETY CONTROLS & DEVICES FOR CONSTRUCTION OPERATIONS

Description

Work under this section consists of providing, positioning, repositioning and maintaining various traffic control devices, inclusive of the Type 'RC' or 'D' drum devices, for the guiding and safety of the traveling public, and for the safety of the working personnel during construction and maintenance operations, and includes channelizing, barricades, detouring and other warning devices, as directed by the Engineer, and/or as requested by the Police Detail Officer, and/or as shown on the plans.

Under this item the Contractor is solely responsible for all safety aspects of the Contract subject to the Provisions of Article 14 of the General Conditions of the Contract.

Materials

Drums shall be Type IV reflectorized in their entire white and orange areas with reflective sheeting. Barricades along with non-metallic reflectorized drums shall conform to Section M9 of the MassDOT

Standard Specifications for Highways and Bridges, latest edition. Newly developed products providing equivalent target value and stability that are acceptable to the Engineer may be used. All barricades and drums shall be maintained in a satisfactory manner, including the removal of dirt or road film that causes a reduction in sign reflective efficiency.

Each barricade and drum used for warning or channelizing at night shall be equipped with a flashing light. All devices that are not lighted at dusk shall be repaired or replaced at no additional charge to the City of Newton.

Materials required under this section need not be new, but must be in first class condition and acceptable to the Engineer. Any materials, that in the judgement of the Engineer, are unsatisfactory in appearance and/or performance, shall be removed and immediately replaced by acceptable units. However, the Contractor is solely responsible to monitor and verify the conditions of the materials, and to take immediate action to remedy any deficiencies otherwise brought to his attention.

Signs for Type 'RC' and 'D' devices are to comply with all applicable provisions of Item 2

All warning and directional devices shall be subject to removal, replacement and/or repositioning as often as is necessary. Deployment of such devices shall be the sole responsibility of the Contractor, therefore ample number of devices must be maintained at all times and at no time is vehicular or pedestrian traffic be a cause for concern.

The Contractor is to work closely with the Safety Officer of their insurance agent to determine, and establish, on an ongoing systematic basis, as the construction operations progress, the number of reflectorized devices that are needed in order to eliminate any and all potential safety hazards to the general public.

Method of Construction

Cones of non-reflectorized warning devices shall not be left in operating position when the day's operations have ceased.

Further, all signs mounted on Type 'RC' and 'D' type devices are to be turned away from traffic at days end when no longer in use.

Basis of Measurement and Payment

The Contractor shall be paid per Calendar Day for each drum unit approved, authorized and/or ordered by the Engineer. Cones shall be considered incidental to the project. Barricades shall be considered incidental to the project. No payment shall be made for any Calendar Days after the Engineer has ordered that the service of the unit is no longer required.

Item 3 shall constitute full payment for all materials, labor and equipment required or incidental to the work described above and/or as shown on the plans throughout the entire term of the project. Any drum which are lost, stolen, destroyed, or deemed unacceptable while their use is required on the project shall be replaced without additional compensation.

Signboards for Type 'RC' and Type 'D' drum devices will be paid under Item 2.

ITEM 4 –ELECTRONIC VARIABLE MOBILE MESSAGE SIGNBOARD(S)

Description

(a) Under this item the Contractor shall furnish and deploy a minimum two (2) mobile MUTCD compliant (Manual On Uniform Traffic Control Device) solar and/or battery powered electronic message signboard which shall be repositioned as necessary, at the direction of the Engineer, for the purpose of notifying the General Public of project related issues. However, no signboard units are to be deployed on the project unless pre-approved, authorized and/or ordered by the Engineer in advance of their use.

Method of Compliance

The mobile signboard shall be mounted on a towable trailer and the entire assembly is to be factory assembled as a single unit.

(c) The signboard shall be powered by a silent means only as no fuel powered generators are to be used.

(d) The display board shall be approximately thirty (30”) inches high by approximately sixty (60”) inches wide and equipped with three (3) light emitting diode (LED) screens, each of which shall be of the ‘auto-dimming’ type on a black background and having full matrix capability. The ‘characters’ (the height of the alpha-numeric) shall be no less than seven (7”) inches tall but in all cases, whenever possible, the height of the ‘character’ shall be maximized (typically up to twenty-four (24”) inches in height). Display boards shall have the capability of providing scrolling and/or flashing messages.

The unit shall be fully programmable by field personnel so that the messages can be changed on an immediate basis at the direction of the Engineer.

The trailer shall be entirely tamper-proof to prevent both the unauthorized access to the programming means of the display board as well as to prevent the unauthorized movement of the trailer itself. Further, the trailer shall be secured in such a manner so as to prevent theft or vandalism.

As directed by the Engineer the signboard unit shall be deployed, repositioned, supplemented and/or discontinued as often as necessary, to meet the ever-changing messaging requirements of the project, and such orders shall occur with immediacy.

As directed by the Engineer the signboard messages shall be composed, changed and/or discontinued as often as necessary, in order to meet the ever-changing messaging requirements of the project and such changes to the composition of the message shall occur with immediacy.

Method of Compliance (Continued)

Signboard units shall be placed in conspicuous locations so they, as well as the messages, are easily seen, but at no time shall the units interfere with pedestrian right-of-ways nor vehicular flow. To that end the Contractor must be prepared to coordinate the siting of the units with the Engineer.

Signboards are to be ‘leveled’ with the roadway surface. Blocking, jacking and/or chocking shall be done in a responsible manner to ensure that the trailer is fully stabilized.

The Contractor is responsible for ensuring that the unit is fully operational at all times, and any repairs, reprogramming, redeployments for solar siting purposes, battery and/or bulb replacements, wholly defective units, units which are rendered unserviceable, or the like, shall be addressed and corrected with immediacy. The intent of this order is to ensure that the continuity of messages are not disrupted and that they are clear and visible at all times within the zone in which the unit is sited.

No signboard units are to be deployed on the project unless pre-approved, authorized and/or ordered by the Engineer in advance of their use.

The Engineer reserves the right to limit the size of the trailer and/or display board to the above noted type should it be deemed in the best interests of the neighborhood's pedestrian and/or traffic flow to do so.

At no time shall any signboard deployed to the site be without a message. The intent of this order is to assure all parties that the board is fully operational while providing 'secondary' messaging during those periods when 'primary' messaging is not required. To that end, once the Engineer has declared that the unit is no longer required the Contractor shall immediately remove it from the site.

The locations of, as well as the actual messages displayed, on the two (2) electronic variable message sign boards shall be determined in the field, by the engineer, changes in which will be required as often as he / she deems necessary to properly inform the public as to critical project activities.

Method of Measurement

The Contractor shall be paid per Calendar Day for each signboard unit approved, authorized and/or ordered by the Engineer. No payment shall be made for any Calendar Days after the Engineer has ordered that the service of the unit is no longer required.

Basis of Payment

Under Item 4 the Contractor will be paid the contract unit price per approved Calendar Day for each signboard unit authorized and/or ordered by the Engineer. The express intent, under this item is to re-use the signboards, moving the signboards from project zone to project zone as the construction operations progress, without any further additional compensation under this item. Under this item signboards are to be furnished and placed which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item, as shown on the plans, as directed by the Engineer and as specified herein.

ITEM 5 – MANUFACTURED CATCHBASIN SEDIMENTATION PROTECTION

Description

Under this item the Contractor shall install sedimentation protection in all catchbasins in the project area in accordance with the detail as shown on the plans. The sedimentation protection shall be strategically installed along the roadway such that any soil contaminated run-off generated by the Contractor's operations are captured in the sedimentation protection. To that end the sedimentation protection shall be continuously moved forward of the work as the work progresses and shall not be removed from any catchbasin until such time as all potential run-off for the immediate workzone is deemed to be reasonably free of silt contamination by the Engineer.

Materials

The sedimentation protection shall be a manufactured unit that is specifically designed as a catchbasin sedimentation containment device, and it shall be provided with integrally equipped fabric lugs through which shall pass #8 (eight) steel reinforcing bar such that, upon the removal of the catchbasin grate, the sedimentation protection shall neither fall into the catchbasin structure nor shall it allow its contents to prematurely empty into the catchbasin unit.

The steel rebars shall be cut and fitted to the sedimentation protection in such a way that they pose no projection hazards. In addition, the steel bars shall be reasonably free of any sharp edges.

In the event the sedimentation protection is installed where there is a curb opening then the Contractor shall also equip the sedimentation protection unit with a foam filler to prevent any sedimentation from bypassing the silt sack.

Method of Construction

The placement of new sedimentation protection shall be at the discretion of the Engineer.

The Contractor shall not commence with any trenching operations until such time as the sedimentation protections have been installed in every catchbasin that lies downstream from his workzone and has the potential of intercepting the run-off from the workzone.

Once the sedimentation protections have been fitted to the catch basins, the Contractor shall replace the catch basin grate in such a way that it lies flush with the top of the catchbasin frame. Whenever this cannot be achieved, or whenever a potential tripping hazard exists then the Contractor shall place a safety device at that location.

The Contractor shall be diligent in keeping the sedimentation protection measures clean and he shall remove all excessive silt either by his own volition or as he is otherwise directed to do so by the Engineer.

Method of Measurement

The Contractor shall continue to move the sedimentation protection measures forward of the work as the Engineer either directs and/or allows or the Contractor shall otherwise install supplemental sedimentation protection measures as the case(s) may necessitate.

When the sedimentation protection devices are emptied it shall be done in a responsible fashion so that the captured silt may be immediately discarded at a legal off site location.

Double catch basins shall be provided with dual sedimentation protection control measures.

Measurements taken for payment of shall be for each new sedimentation protection measure that is initially provided by the Contractor. To that end the Contractor will be required to subsequently remove, empty and move the sedimentation protection measure to a new location without further compensation.

Basis of Payment

Under Item 5 the Contractor will be paid the contract unit price for each catchbasin sedimentation control measure that is initially provided by the Contractor under the direction of the Engineer. To that end the Contractor will be required to subsequently remove, empty and then move the used sedimentation control measure to a new location without further compensation, which unit price shall include full compensation for all labor, materials, tools, equipment and all incidental work necessary to complete the work under this item, as shown on the plans, as directed by the Engineer and as specified herein.

ITEM 6 –SAWCUT OF EXISTING REINFORCED CONCRETE ROADWAY (PERIMETERS OF EXCAVATION AREAS ONLY)

ITEM 7 – SAWCUT OF EXISTING BITUMINOUS CONCRETE ROADWAY

Description

Under Item 6 & 7 the Contractor shall coordinate with the Engineer while marking out the locations of all perimeter sawcuts to be made in the project area. The Contractor is not to sawcut under either Item in any location other than those previously marked out in the field. The contractor is advised that only perimeter sawcuts which detach the target repair areas from the remaining roadway will be paid for under Item 6. The Contractor is further advised that additional internal sawcuts which he deems necessary to further aid in the excavation of the concrete roadway shall be factored into the cost of Item 8.1 – Excavate And Dispose Of Concrete Roadway.

Only water cooled self-propelled self-contained power driven saws shall be used to cut the roadway. No wheel cutters or similar devices are to be used in this operation. Water shall be provided by the Contractor who shall coordinate such activities, metering and required backflow prevention devices with the City of Newton Utilities Division.

In no case shall any slurry or residue created by the sawcutting operation be discharged directly into any catch basin, manhole or stream at any time during the project.

Method of Construction

The contractor shall supply all materials required to mark out the sawcut locations on the ground with the Engineer.

The Contractor shall make an investigation of the site conditions and shall retrieve any additional information which he deems necessary in order to accurately locate any critical project elements.

The self-propelled water cooled saw shall not make and/or produce excessive noise or dust during this operation. The Engineers decision in these matters will be final.

Water shall be provided by the Contractor for these operations and no sawcutting shall be allowed when the prevailing air temperature is forty (40) degrees and falling. The Contractor is to make all arrangements with the City of Newton Utilities Division for the installation of a temporary and/or portable water meter system & backflow prevention device and in all cases the Contractor shall install a gate valve at the source point of the flexible hose connection which can be easily closed should the flexible hose fail.

The flexible water line feeding the saw unit is to be furnished by the Contractor and shall be manufactured from heavy duty materials to resist failure from traffic abrasion. Further, any flexible line shall be leak free and shall be well marked so as not to impede vehicular and/or pedestrian safety.

The kerf of the saw blade shall extend completely through the entire concrete roadway so that when the pavement material is removed there is no tearing of that portion of the roadway which is to remain.

In those cases where obstructions disallow the saw to cut completely through to the end of the run then the Contractor shall use pneumatic hammers to complete the cut.

Method of Measurement

(k) Under Items 6 & 7, the Contractor will be paid the contract unit price for each linear foot of sawcutting completed, whose basis of measurement is specified in the detail titled 'Sawcutting Detail' on the associated contract drawings.

Basis of Payment

Under Items 6 & 7 the Contractor will be paid the contract unit price per linear foot for all labor, equipment and materials which will be required to complete the perimeter full depth sawcutting of the existing reinforced concrete roadway to be removed throughout the entire term of the project, inclusive of the supplying of water.

Under Items 6 & 7 the Contractor will be paid the contract unit price per linear foot for all labor, equipment and materials which will be required to complete full depth sawcutting of the existing bituminous concrete throughout the entire term of the project, inclusive of the supplying of water.

ITEM 8.1 – EXCAVATE AND DISPOSE OF CONCRETE ROADWAY

ITEM 8.2 – EXCAVATE AND DISPOSE OF BITUMINOUS CONCRETE (SHOULDERS, INTERSECTIONS AND PROJECT LIMITS)

ITEM 8.3 – EXCAVATE AND DISPOSE OF BITUMINOS CONCRETE UTILITY TRENCH (AS DIRECTED BY THE ENGINEER)

Description

Under Item 8.1, the contractor is to excavate and dispose of the sections of existing concrete roadway which are located internal of the perimeter sawcuts completed under Items 6 & 7. The contractor is to use an excavator or back-hoe bucket to remove the sections of roadway as quickly and efficiently as possible while creating as little dust, noise or damage to adjacent sections of roadway to remain intact.

The Contractor will not be permitted to use any method of excavation involving the smashing or breaking up of the previously detached portions of the roadway by the physical dropping of a weighted object on the roadway. Note the use of a ram hoe will be allowed but the City of Newton will at all times have the ability to limit the size of the equipment to be utilized during the excavation. The Contractor is advised that the intent of this order is to protect the infrastructure located below grade of the existing reinforced concrete roadway. The Contractor is further advised that the repair of any damage inflicted to any underground

utilities or infrastructure as well as any incidentals required to complete such repairs shall be completed by the Contractor at no additional cost to the City of Newton.

Further, the excavation areas are to be brought up to existing grade of adjacent concrete roadway according detail titled 'Detail Highlighting Spot Repairs of Ex. Reinf. Conc. Slab' on the associated contract drawings. No excavation shall be left open overnight under any circumstances.

Further, under Item 8.1 the contractor is advised to perform no excavation internal of sawcuts surrounding any utility company owed castings.

Under Item 8.2, the contractor is to excavate and properly dispose of all bituminous concrete up to 4" in depth in any location throughout the project, including but not limited to the shoulders and project limits on Lowell Avenue and Centre Street and all streets which intersect those streets in the project area.

Under Item 8.3, the contractor is to excavate and properly dispose of all bituminous concrete, gravel material and flowable fill 24" below existing grade of the concrete roadway as shown on the related details for trench repair as found in the contract drawings.

Materials

Reinforced concrete roadway excavations are to be restored with Dense Graded Crushed Stone compacted in three (3) inch lifts (to be paid for under Item 9) and Type I-1 Bituminous Concrete Base Course (to be paid for under Item 10). Materials utilized to restore asphalt excavations are defined in Item 10.

Method of Construction

The Contractor is not to begin excavation under Item 8.1 until all the required sawcuts under Item 7.1 have been completed to the satisfaction of the Engineer. The intent of this order is to move the excavations along as quickly and efficiently as possible once they have begun, at the same time allowing placement and compaction of dense graded crushed stone and placement and compaction of bituminous concrete type I-1 binder.

Because the sections of concrete roadway to be excavated are in a poor / failed condition, it should not be necessary for the Contractor to break up the roadway before excavation. The City of Newton desires that the existing roadway be removed in pieces which are as large as possible. The intent of this order is to minimize noise, the creation of excess dust and damage to adjacent concrete panels as well as existing underground utilities.

If the sections of roadway are too large to be removed with a typical bucket equipped excavator, it is preferred that the sections of roadway are lifted out. The contractor shall be allowed to use a 'ram hoe' to break apart the concrete roadway during excavation. Any additional sawcuts located internal of the detached portion of the reinforced concrete road which the Contractor deems necessary to excavate the concrete shall not be paid for under Item 7.1 (Sawcut of Existing Reinforced Concrete Roadway (Perimeters of Excavation Areas Only)) and should be factored into the unit price of Item 8.1 – Excavate and Dispose of Concrete Roadway.

Care shall be exercised such that the existing subbase shall not be disturbed during excavation. In the event that the excavation does disturb the sub base of the existing road, the contractor is to either remove by hand all loose and uncompacted material or recompact the material using a jumping jack type compactor. During

this process the Contractor must ensure that the corners of the excavation are fully compacted. If the mechanical equipment can not access the corners, the Contractor shall supplement with hand tamping to fulfill this requirement.

Basis of Measurement

Item 8.1 shall be measured in terms of cubic yards of concrete roadway excavated and properly disposed of, as verified with physical measurements, in the field, by the engineer.

Item 8.2 shall be measured in terms of square yard as of bituminous concrete excavated and properly disposed of, as verified with physical measurements, in the field by, the engineer

Item 8.3 shall be measured in terms of square yard as of bituminous concrete excavated and properly disposed of, as verified with physical measurements, in the field by, the engineer

Basis of Payment

Under Item 8.1, the contractor shall be paid the contract unit price for each cubic yard of concrete roadway which has been excavated and properly disposed of, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work as described under this item as directed by the Engineer and as specified herein. All basis of payment measurements are to be taken in the field by the engineer.

Under Item 8.2, the contractor shall be paid the contract unit price for each square yard of bituminous concrete which has been excavated and properly disposed of, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work as described under this item as directed by the Engineer and as specified herein. All basis of payment measurements are to be taken in the field, by the engineer prior to excavation.

Under Item 8.3, the contractor shall be paid the contract unit price for each square yard of bituminous concrete trench which has been excavated and properly disposed of, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work as described under this item as directed by the Engineer and as specified herein. This item shall also include the removal and safe disposal of all materials found within 24" of the existing grade within the limits of trench patch. All basis of payment measurements are to be taken in the field, by the engineer prior to excavation.

ITEM 9 - FURNISH AND PLACE DENSE GRADED CRUSHED STONE

Description

All dense graded crushed stone used to complete the work called for in this contract shall be furnished and installed under this item (Item 9) as directed by the Engineer. Only when specified in these specifications, shown on the associated contract drawings, or approved by the Engineer is the Contractor to provide dense graded crushed stone under this item.

The location and depths of dense graded crushed stone are at the discretion of and as directed by the Engineer. If the Contractor feels dense graded crushed stone is required to complete any contract item, he is

to contact the Engineer and obtain approval for furnishing and placing any dense graded crushed stone which is to be paid for under this item.

Materials

Dense graded crushed stone shall conform to Division III, Materials, subsection M2.01.7 of the Commonwealth of Massachusetts Department of Transportation Standard Specifications for Highway and Bridges, latest edition. All dense graded crushed stone shall be subject to the approval of the Engineer.

Method of Construction

The dense graded crushed stone shall be spread from self-spreading vehicles or with power graders of approved types or by hand upon the prepared subbase. Care shall be taken while spreading the dense graded crushed stone to rake forward and distribute the largest stone so that they will be at the bottom of the gravel course and be evenly distributed.

The dense graded crushed stone so placed shall be thoroughly rolled true to the lines and grades, as directed, with a self-propelled three (3) wheeled roller or tandem roller weighing not less than twelve (12) tons until it presents a firm, stable and unyielding surface and until it ceases to creep under the wheels of the roller. Any depressions that appear during or after rolling shall be filled with gravel and re-rolled until the surface is true and even.

Any area that is inaccessible to mobile mechanical equipment or in restricted areas shall be compacted with pneumatic rammers or powered hand tampers. The contractor is advised that this is extremely critical in the corner areas of the concrete roadway excavations and such compaction is critical to the long term success of the project.

Compaction shall be carried on until the density of the material is not less than ninety-five (95) per cent of the Standard Proctor Density as determined by Standard Laboratory Compaction Test. The Contractor shall arrange and pay for and submit to the Engineer results of such tests taken in such number as to indicate a test of every eight hundred (800) square feet of compacted area.

The dense graded crushed stone base course shall be fine graded and rolled to a true grade, the prescribed number of inches in depth, and parallel to the finished grade of the roadway. The Contractor shall, when the Engineer orders to do so, place iron pins or stakes along the centerline, and both gutter lines or wherever he may decide, and mark the necessary grades thereon. The Contractor shall supply all the labor and material necessary.

Method of Measurement

Dense graded crushed stone shall be measured fully compacted in place, to the limits specified on the plans or as directed by the Engineer, with no percentage added.

Basis of Payment

Under Item 9 the Contractor will be paid the contract unit price per cubic yard for furnishing and placing gravel and/or dense graded crushed stone respectively, which unit price shall include full compensation for all labor, materials, tools, and equipment and all incidentals necessary to complete the work under this item as shown on the plans, as directed by the Engineer and as specified herein.

ITEM 10 – FURNISH AND INSTALL BITUMINOUS CONCRETE BASE COURSE, TYPE I-1 (SHOULDERS, INTERSECTIONS, TRENCH PATCHES AND PROJECT LIMITS)

(a) Under Item 10 the Contractor shall remove the existing asphalt at the shoulders and project limits and replace with 2” of bituminous concrete base course, type I-1. This series of two activities is to be combined into one continuous operation, both tasks being completed back to back in the same business day. The intent of this order is to maintain driveway access to all business and residents along the project corridor throughout the duration of the project. The contractor is disallowed from leaving any portion of the project in such a condition that access to any driveway will be impeded overnight. Special care shall be used while completing this item along the business corridor of the project as driveway access is critical to the daily functions of said business and it is the desire of the City to disrupt such access as minimally as possible.

(b) Further, under Item 10, the contractor is to prepare the project limits (intersections and project limits Centre Street as directed by the Engineer and marked out in the field) with saw cuts. The Contractor is to excavate existing asphalt at the intersections, shoulders and project limits and replace with a base course of 4” of bituminous concrete binder, Type I-1. This base course shall meet the concrete roadway at the elevation of the roadway itself while leaving a 1 ½” paper joint at the asphalt side of operation at the project limits, (See detail titled ‘PREPARATION DIRECTIVE HIGHLIGHTING THE PAVING OPERATION AT PROJECT LIMITS – BASE COURSE’. Further the Contractor shall leave an additional 1 ½” of curb reveal exposed corresponding to the final grades as shown on the titled, ‘Typical Cross Section Highlighting The Asphalt ‘Sub-Leveling Course Thickness & Targeted Finish Reveal at The Curblin’, while considering the placement of the final 1.5” overlay.

Materials

(c) Bituminous Concrete Binder to be furnished and installed under this Item shall meet the requirements specified in Section M3.11.00 of Division III, Materials and the following subsections of The Commonwealth of Massachusetts, Massachusetts Department of Transportation Standard Specifications For Highways and Bridges, latest edition.

Mineral Aggregate	M3.11.04
Mineral Filler	M3.11.05
Bituminous Material	M3.11.05
Composition of Base Course Mixture (see Table ‘A’) ...	M3.11.02

Method of Construction

(d) Under Item 8.2 or 8.3, the contractor shall remove the existing asphalt at the shoulders, intersections and project limits by stripping the asphalt off the existing roadway. Saw cuts are necessary at the limits of the project where Centre Street meets all intersecting streets and at the Centre Street limits. Said saw cuts shall be marked out on-site by a City of Newton agent and completed with a self propelled water-cooled saw and shall be paid for under Item 7.2 (Sawcut of Existing Bituminous Concrete). While placing the base course of bituminous concrete, the contractor shall install a 1 ½” paper joint at all project limits.

(e) The contractor shall re-grade the excavation areas as required such that the final 1.5" overlay shall neatly meet the rims of any existing drain inlets (unless deemed unsuitable according to the Engineer) at the curb line while considering the final curb reveal and the 4" bituminous binder course placement. The binder course shall meet the edge of the existing concrete roadway at its existing elevation in all cases.

(f) The final edge of pavement grade found at the base of the existing granite curbing shall be found on the grading plans on the contract drawings. The contractor is not to adjust or re-set any existing curbing under this contract. If excavation or grading is required in the shoulder corridor area such that the minimum of 4" of asphalt can be met, it shall be completed and paid for under this item. If the excavation reveals fill material is required the Contractor shall utilize dense graded crushed stone for supplemental grading. Dense graded crushed stone shall be according to and paid for under Item 9.

(g) Bituminous concrete shall be spread by hand in the asphalt shoulder area due to the limited amount of space available, thus hindering the use of a mechanical spreader. Further, the Contractor shall compact the bituminous concrete in lifts equal to one half of the total amount of binder to be placed in the shoulder area. Vibratory plate compaction equipment shall be used to complete the compaction, except in corners where the plate compactor can not access. Those corner areas are to be compacted by hand using hand tamping equipment. The intent of this order is to maintain long term integrity of the asphalt in those areas so as to prevent future settlement of poorly compacted asphalt.

(h) In addition, Item 16, paragraphs h & j-u inclusive.

Method of Measurement

(i) Item 10 shall be measured in terms of ton of bituminous concrete base course binder furnished and installed, fully compacted.

Basis of Payment

Under Item 10 the Contractor will be paid the contract unit price per ton, graded, paved and compacted, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item, as shown on the plans, as directed by the City of Newton agent.

Sawcutting of the existing bituminous concrete roadway required to complete the work described under Item 10 shall be paid for under Items 6 & 7.

Excavation and Disposal of the existing bituminous concrete roadway required to complete the work described under Item 10 shall be paid for under Item 8.2. and Item 8.3, whichever is applicable.

ITEM 11 – CLEAN AND PREPARE SPALLED SECTIONS OF CONCRETE ROADWAY AND RESTORE WITH HYDRAULIC CEMENT

Description

Under Item 11, the contractor is to rehabilitate the sections of concrete roadway whose failure has been characterized as 'spalling' or 'scaling' of the concrete. The sections to be repaired under this item are to be marked by the Engineer only. The contractor is not to perform any work under this item in any locations other than those marked in the field by the engineer.

Under this item the depth of the failure is unknown, but regardless of how deep the failure is embedded into the existing concrete, the Contractor is to expose sound concrete prior to placing any hydraulic cement, and is advised to plan accordingly. Note, the City of Newton does not expect any re-bar to be encountered during this operation and for estimation purposes, has assumed an average failure depth of three (3) inches.

Materials

The City of Newton desires hydraulic cement to be utilized for the repair of the spalled areas of the concrete roadway due to its expansive and rapid setting properties. The hydraulic cement mix shall be according to the following requirements:

ASTM C1157-03 Standard Performance Specification for Hydraulic Cement.

Method of Construction

The contractor is to use a back-hoe, or other hydraulic piece of construction equipment to pick away at the scabbed areas and remove the existing bituminous asphalt and failed concrete. He is to remove as much loose and degraded concrete from the spalled area by picking and scraping as possible. Second, he is to use a stiff wire brush attached to a piece of power equipment to finish removing any loose and degraded material. This process is to continue until all asphalt and unsound concrete has been removed and only sound concrete remains intact within the spalled area. Final preparation shall be completed by blowing compressed air into the repair area to eliminate all fine particulates. The contractor shall use extreme caution during the entire process so as not to blow or force any material into the path of traveling vehicles or pedestrians, during the entire operation.

Upon completion of preparing the scab for patching, the Contractor shall immediately fill each scab with hydraulic cement. Care shall be exercised such that there are no void spaces within the patch or between the patch and the existing concrete.

The Contractor shall be allowed to prepare several scabs at once, but must blow each scab out with compressed air immediately prior to the placement of the hydraulic cement. No scabs are to be left in disrepair over night. Due to the short pot life of hydraulic cement, the contractor shall not mix more material than is required for any series of patches which are to be completed in the span of the pot life of the mix.

Method of Measurement

Due to the irregular shape of the repair areas under Item 11, the Engineer shall measure the repair areas in terms of square feet using geometrical approximations. Simple geometrical shapes such as rectangles and triangles will be drawn on the ground encompassing the repair area, they will then be measured and recorded and those approximate areas will be the basis of payment. In no case shall the area measured for basis of payment be less than the amount of work actually performed under Item 11.

Basis of Payment

(h) Under Item 11, the contractor shall be paid the contract unit price for each square foot measured via geometrical approximations of hydraulic cement installed, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this

item as directed by the Engineer and as specified herein. This price includes all excavation, preparation and disposal of construction debris required to prepare each scab for repair under this item.

ITEM 12 - CLEAN EXISTING JOINTS (LONGITUDINAL AND TRANSVERSE) IN CEMENT CONCRETE PAVEMENT

Description

The work to be done under Items 12 shall consist of performing all operations and furnishing all materials, labor and equipment necessary for removing the existing joint filler compound, cleaning by wire brush & compressed air and general preparation of the joints for the completion of Item 14 – Seal Joints and Cracks With Fiber Reinforced Asphalt Sealant.

The depth of Joint cleaning and preparation under Item 12 shall be to a depth of 2”.

Equipment

Equipment used in the performance of the work required by this section shall be subject to the approval of the Engineer and in satisfactory working condition at all times.

Air compressors shall be portable and capable of furnishing not less than 100 cubic feet of air per minute at not less than 90 pounds per square inch of pressure at the nozzle head. To ensure that the compressed air is free of trapped oil and water, the compressor shall be equipped with traps that will remove any oil and water from the compressed air.

A power driven wire brush shall be used to clean joints to a depth of 2”. The power driven wire brush shall consist of a power unit driving a stiff wire brush wheel of sufficient size to permit removal of all loose material at a speed of not less than 1,000 RPM. The power unit and brush shall be mounted on a frame provided with suitable wheels and handles in order that the brush may be propelled along the joints to be cleaned. Brush rotation shall move debris away from the machines operator.

A mobile, self-propelled joint plow shall be used to remove in-place joint sealant to a depth of 2”. It shall be capable of inserting a carbon tipped cutting tool into a joint in Portland cement concrete pavement for the purpose of cutting old sealer from each side of the joint wall, which shall be completed in such a manner that will not spall or otherwise damage the pavement in any other way.

Hand tools shall consist of brooms, shovels, metal bars with chisel shaped ends, and any other tools which may be satisfactorily used to accomplish this work

The unit used to melt the joint sealing compound shall be a double boiler, indirect fired type. The space between the inner and outer shells shall be filled with a suitable heat transfer oil or substitute having a flash point of not less than 600 degrees Fahrenheit. The kettle shall be equipped with a satisfactory means of agitating the joint sealer at all times. This may be accomplished by continuous stirring with mechanically operated paddles and / or by a continuous circulating gear pump attached to the heating unit. The kettle must be equipped with thermostatic control between 200 degrees Fahrenheit and 550 degrees Fahrenheit.

Equipment for drying if necessary and for grass removal shall be a Propane Torch unit which operates at 2000 degrees Fahrenheit unit and a gas velocity of 2000 feet per second.

Equipment for applying the sealing material shall consist of a pressure applicator shoe with suitable hose connection to the melting kettle. The applicator shall be equipped with a three (3) or a five (5) inch applicator head as directed by the Engineer. The Engineer may, at his discretion, require the Contractor to change from one size applicator head to another when moving from one project zone to another.

The sealant in the joints of the existing cement concrete roadway shall be removed by use of a joint plow or other approved equipment to the full width of the joint and a depth of two (2) inches.

Under this item, the joints shall be thoroughly cleaned to a depth of two (2) inches. The joints shall be thoroughly cleaned of all existing sealing material, dirt, oil, pebbles, or other foreign material by use of routing and resurfacing machines, mechanically operated wire brushes, air compressors and / or other approved equipment to the specified depth. Cleaning of joints shall be accomplished in a manner which will not spall or otherwise damage the existing pavement.

Immediately prior to the sealing operation (Item 14 - Seal Joints and Cracks With Fiber Reinforced Asphalt Sealant) all loose debris shall be removed from the joints by compressed air. Removal of all debris from the adjacent pavement shall be done immediately following the compressed air operation in a manner which will not force the debris back into the joints. The final cleaning of the joints with compressed air immediately prior to the completion of Item 14 shall be paid for under this item.

Method of Measurement

This item shall be measured in terms of linear feet of joints fully cleaned and prepared for the sealing operation.

Basis of Payment

Under this item the Contractor will be paid the contract unit price per linear feet of joint fully cleaned and prepared, which unit price shall include full compensation for all labor, materials, tools and equipment necessary to complete the work under this item as directed by the Engineer and as specified herein.

ITEM 13 - CLEAN VARIABLE WIDTH CRACKS IN CEMENT CONCRETE PAVEMENT

Description

The work to be done under this item shall consist of performing all operations and furnishing all materials, labor and equipment necessary for cleaning of cracks greater than 3/8" wide in the existing concrete pavement. The engineer shall be the sole judge as to which cracks are to be repaired under this item. Cracks to be cleaned and sealed shall be individually marked out on the ground in paint by the engineer and repaired and paid for on an 'AS-DIRECTED' basis according to descriptions contained herein, the associated contract drawings, and the discretion of the Engineer.

Equipment

Equipment used in the performance of the work required by this section shall be subject to the approval of the Engineer and in satisfactory working condition at all times.

A power driven wire brush shall be used to clean joints. The power driven wire brush shall consist of a power unit driving a stiff wire brush wheel of sufficient size to permit removal of all loose material at a

speed of not less than 1,000 RPM. The power unit and brush shall be mounted on a frame provided with suitable wheels and handles in order that the brush may be propelled along the joints to be cleaned. Brush rotation shall move debris away from the machines operator.

Air compressors shall be portable and capable of furnishing not less than 100 cubic feet of air per minute at not less than 90 pounds per square inch of pressure at the nozzle head. To ensure that the compressed air is free of trapped oil and water, the compressor shall be equipped with traps that will remove any oil and water from the compressed air.

Hand tools shall consist of brooms, shovels, metal bars with chisel shaped ends, and any other tools which may be satisfactorily used to accomplish this work

Method of Construction

Under this item, the cracks shall be thoroughly cleaned to the full depth of the joint. The cracks shall be thoroughly cleaned of all existing dirt, oil, pebbles, or other foreign material by use mechanically operated wire brushes, air compressors and / or other approved equipment. Cleaning of joints shall be accomplished in a manner which will not spall or otherwise damage the existing pavement and the contractor shall use care so as not to spread debris in either vehicular or pedestrian travel paths.

Method of Measurement

Cleaning and sealing of cracks in cement pavement shall be measured by the linear foot of cracks actually cleaned and prepared, complete in place.

Basis of Payment

Under Item 13 the Contractor will be paid the contract unit price per linear foot of cracks in the cement concrete pavement, fully cleaned and prepared, complete in place, which unit price shall include full compensation for all labor, materials, tools and equipment necessary to complete the work under this item as directed by the Engineer and as specified herein.

ITEM 14 – SEAL JOINTS AND CRACKS WITH FIBER REINFORCED ASPHALT SEALANT

Description

The work to be done under this item shall consist of performing all operations and furnishing all materials, labor and equipment necessary for sealing of joints and cracks with fiber reinforced asphalt sealant, which have been previously prepared under Item 12 and Item 13 respectfully.

Materials

The sealing material shall be an asphalt-fiber compound designed to improve the strength and performance of the parent asphalt sealant.

The asphalt sealant shall be AC-10 or AC-20 with a penetration of 75-100.

The fiber reinforcing materials shall be short-length polyester fibers having the following properties

Length ----- 7 mm
Diameter ----- 0.0008 inch plus or minus 0.0001 inch
Specific gravity ----- 1.32 – 1.40
Melt temperature ----- 480 degrees Fahrenheit minimum
Ignition temperature ----- 1000 degrees Fahrenheit minimum
Tensile strength ----- 75,000 PSI plus or minus 5,000 PSI
Break Elongation ----- 33% plus or minus 9% (when fibers are fully drawn)

The fibers shall be mixed so as to comprise five (5) to eight (8) percent by weight of the compound. The fibers are to be chemically compatible and shall function to redistribute stress and strain forces that are imposed on the sealant by various sources, such as thermal, traffic loading etc. The contractor shall furnish a manufacture's certificate of compliance before any work begins.

Sealing material shall be applied according to the manufacture's instructions and as specified herein, and the sealer shall be well bonded to the pavement.

No sealer shall be installed until the joints to be sealed have been inspected and approved by the engineer. The joints shall be clean and dry when the sealing material is placed. All joints shall be completely filled with sealant flush with the pavement, and the sealer shall be well bonded to the pavement, without formation of voids, bubbles or entrapped air. More than one application of sealer may be necessary to fill the joint to the required level.

No sealing material shall be applied in wet joints or where frost, snow or ice is present, nor when the ambient temperature is below 40 degrees Fahrenheit. Examination will be made to determine that the joints are filled solidly, that the sealer is bonded to the pavement, adheres without cracks, separation, or openings, and set to withstand traffic. All excess or spilled sealer shall be removed from the pavement by approved methods and legally disposed.

The unit used to melt the joint sealing compound shall be a double boiler, indirect fired type. The space between the inner and outer shells shall be filled with a suitable heat transfer oil or substitute having a flash point of not less than 600 degrees Fahrenheit. The kettle shall be equipped with a satisfactory means of agitating the joint sealer at all times. This may be accomplished by continuous stirring with mechanically operated paddles and / or by a continuous circulating gear pump attached to the heating unit. The kettle must be equipped with thermostatic control between 200 degrees Fahrenheit and 550 degrees Fahrenheit.

Equipment for drying if necessary and for grass removal in cracks shall be a Propane Torch unit which operates at 2000 degrees Fahrenheit unit which operates at 2000 degrees Fahrenheit and a gas velocity of 2000 feet per second.

Equipment for applying the sealing material shall consist of a pressure applicator shoe with suitable hose connection to the melting kettle. The applicator shall be equipped with a three (3) or a five (5) inch applicator head as directed by the Engineer. The Engineer may, at his discretion, require the Contractor to change from one size applicator head to another when moving from one project zone to another.

Method of Measurement

Under Item 14, the Contractor will be paid the contract unit price per gallon of reinforced asphalt sealant, complete in place, which unit price shall include full compensation for all labor, materials, tools and equipment necessary to complete the work under this item as directed by the Engineer and as specified herein.

Method of Payment.

Item 14 shall be measured in terms of gallons of asphalt sealant installed in the joints which have been fully prepared under Items 12 & 13, which unit price shall include full compensation for all labor, materials, tools and equipment necessary to complete the work under this item as directed by the Engineer and as specified herein.

ITEM 15 –EMULSIFIED TACK COAT FOR LEVEL COURSE AND FINAL OVERLAY INSTALLATION

Description

Under Item 15, the Contractor shall place, in a controlled manner, an emulsified tack coat for the purpose of aiding in the adhesion between the base level course and the existing concrete roadway and the base concrete roadway and the final bituminous concrete overlay. Due to the irregular shape of the areas of level course to be placed, the Contractor is to use extreme care in selection of methodology and equipment to complete this Item.

Materials

Tack coat to be used under this item shall be an emulsified asphalt tack coat conforming to M3.03.0 of The Commonwealth of Massachusetts, Massachusetts Highway Department, Standard Specifications for Highways and Bridges, 1988. Also, asphalt emulsions shall be according to AASHTO-M140 for rapid setting (RS) type asphalt emulsion.

Method of Construction

Prior to the application of the emulsified tack coat the Contractor shall ensure that all catch basins are covered to the fullest extent with temporary steel plates to prevent any material from entering the drainage structures. In the event contamination of the structure does take place then the Contractor shall immediately remove all such contaminating material to the satisfaction of the engineer.

Prior to the application of the emulsified tack coat, the contractor is to ensure that all loose and/or residual material has been cleaned off the base to be treated by tack coat. Acceptable means of cleaning the base surface to be treated with emulsified tack coat include mechanical street sweeping or a combination of hand sweeping followed by the blowing off of the surface with compressed air. The asphalt emulsion shall be uniformly applied to the roadway by mechanical means at a consistent

Application rate of 0.1 gallons / square yard. The means and methods used for the application for the bituminous tack coat shall be subject to the approval of the Engineer, and such

equipment, as well as the process of application, shall commence in such a manner that no adjacent structures, vehicles and/or other site amenities are splattered or are otherwise contaminated by the tack coat.

In the event splatter and/or contamination takes place then the Contractor shall be responsible for immediately cleaning the affected item(s) to the satisfaction of the Engineer.

The distribution truck associated with the application of the emulsified tack coat shall be equipped with a physical metering system or on board computer system so that the Engineer can witness the verification of the application rate of the asphalt emulsion. Further, the Contractor shall have at least one laborer experienced in the verification of tack coat application rate on site at all times during the operation to guide the Engineer through the verification procedure.

Asphalt emulsion applied to the roadway shall only be applied under clear or partly cloudy skies without the threat of rain. The contractor is not to schedule bituminous roadway application unless such favorable weather conditions are professionally forecasted by a recognized weather agency, and at the request of the Engineer, this forecast shall be filed with Engineer in hard-copy form. Further, no bituminous concrete shall be applied upon a residually wet bituminous surface or otherwise upon a saturated soil surface, and in no case shall any bituminous concrete be accepted if it has been prematurely cooled by rain either while on the truck or after it has been applied to the roadway,

The asphalt emulsion mixture shall be delivered to the work in such condition that it is easily workable and can be efficiently laid.

Method of Measurement

Under Item 15 the installation of the asphalt emulsion tack coat shall be measured in term of gallons of tack coat applied, as verified in the field by the Contractor as witnessed by the Engineer.

Basis of Payment

Under Item 15 the Contractor will be paid the contract unit price per gallon of asphalt emulsified tack coat installed, complete in place, as verified in the field by the Contractor as witnessed by the Engineer, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item, as directed by the engineer, and as specified herein.

ITEM 16.1 - FURNISH AND INSTALL LEVEL COURSES OF BITUMINOUS CONCRETE TYPE I-1

ITEM 16.2 - FURNISH AND INSTALL BITUMINOUS CONCRETE – ‘SAND MIX’ – FOR FEATHERING THE EDGES OF THE TOP TIER LEVEL COURSE

Description

Under Item 16.1 the Contractor shall furnish and place bituminous concrete Type I-1 as shown on the plans, as directed by the Engineer and as specified herein.

Under Item 16.2 The Contractor shall furnish and place bituminous concrete – ‘Sand Mix’ as shown on the plans, as directed by the Engineer and as specified herein.

Bituminous concrete Type I-1 shall be spread by mechanical means and utilized for the sub-leveling and top tier leveling courses. Bituminous concrete – Sand Mix shall be spread by hand at the limits of the top tier leveling course for the purpose of feathering out the exposed vertical face of the top tier leveling course to create a smooth transition on which the geotextile paving fabric will be installed under Item 20.

Materials

Type I-1 mix shall be composed of mineral aggregate, mineral filler and bituminous material, plant mixed and laid hot. The mixing and materials shall conform to the current specifications as set forth in the Commonwealth of Massachusetts Department of Transportation Standard Specifications for Highway and Bridges, Sections 460 and M3, latest edition.

Sand Mix shall be composed of mineral aggregate, mineral filler and bituminous material, plant mixed and laid hot. The mixing and materials shall conform to the current specifications as set forth in ASTM D 3515, Hot Mixed, Hot-laid Bituminous Paving Mixtures.

Method of Construction

In a general sense, the asphalt level course shall be applied only in the areas specified, and shall terminate to the minimum possible depth at the outside limits of the level areas. The level course, in a general manner, shall increase in thickness as you move from the outside of the road toward the center such that a crown will be created in the center of the final paved roadway. The proposed level course shall be spread in accordance to these written specifications, associated project drawings (see details titled, ‘Isometric Highlighting Pins & Guideline’ & Typical Cross Section Highlighting The Asphalt Sub-Leveling Course Thickness & Targeted Finish Reveal At The Curblines’ on the approved plan) and the discretion of the engineer.

The bituminous concrete level course shall be laid on top of the existing concrete roadway, whose base has been fully refurbished and has been treated with a topical coating of asphalt emulsion tack coat. The level course application shall immediately follow the placement of asphalt emulsion once

Method of Construction (Continued)

the emulsion has 'flashed' from brown to black and in all circumstances the Contractor is to complete the installation of the bituminous level courses on the same business day as the completion of Item 15 (Emulsified Tack Coat (Level Coursed and Final Overlay installation)) and is hereby advised to plan accordingly.

(h) The Type I-1 bituminous concrete mix shall be spread with a mechanical spreader of the self-powered type having a floating screed assembly controlling the elevation of the strike-off. The screed or strike-off member shall be adjustable to the shape of the cross-section of the finished pavement and shall be of such design as to produce without tearing, shoving or gouging, a finished surface of the evenness and texture desired. The use of road graders, or towed spreaders, shall not be allowed. If, in the opinion of the Engineer, the spreading and finishing equipment is not providing satisfactory results, he shall order the use of such equipment be discontinued and other satisfactory spreading and finishing equipment shall be provided by the Contractor. Hand spreading may be used in places inaccessible to the machine and when permitted by the Engineer. When hand spreading is permitted, the mixture shall be dumped, upon arrival, on approved steel dump sheets outside the area in which it is to be spread and shall then immediately laid to the required depth.

(i) The Sand Mix shall be spread by hand with a lute. The purpose of laying the sand mix by hand is to taper off the rough edge created by the top tier leveling course so that a smooth base with even transitions is created and can be utilized to place the geotextile paving fabric on. Sand Asphalt shall be compacted either by hand or with a narrow shoe compactor. Use of plate compactors under Item 16.2 will not be permitted.

(j) The Engineer may at any time order the use of side forms which shall be of a type subject to his approval. The forms shall be set so that the finished pavement shall be at a true line and grade as determined by the Engineer. The Engineer may in lieu of forms order the use of iron pins with grade marked thereon, so placed that they will not interfere with the travel of the machine spreader, but close enough so that a short straight edge placed on the newly laid pavement can reach a string line tied from pin to pin, and afford a visual check on the thickness of the newly laid pavement. The Engineer may order the pins to be used on the base, binder, or top courses. All expenses involved in the use of pins including the furnishing of such iron pins shall be borne by the Contractor.

(k) The bituminous concrete must be kept clean during hauling and handling and covered during transit with canvas or other material which will retain the desired pavement temperature. These mixtures must not be hauled in such a manner that segregation of the ingredients takes place, or that a crust is formed on the surface, or that the mixture will crumble or flatten out when dumped. Trucks which transport the mixture shall be tight, and the side of the bodies shall be coated with a thin film of soap solution. The dispatching of trucks from the distribution point shall be so arranged that all the material which is to be delivered at or on the road surface during any day may be placed and shall have received final compression in a continuous manner in order to minimize cold seaming.

(l) The bituminous concrete mixture shall be delivered to the work in such condition that it is easily workable and can be efficiently laid. The mixture shall be laid only on an approved base course which is dry and only when weather conditions are suitable which shall be decided by the Engineer.

(m) All bituminous concrete applied to the roadway shall only be applied in bright sunlight or partly cloudy weather without the threat of rain. The Contractor is not to schedule bituminous roadway application unless such favorable weather conditions are professionally forecast by a recognized weather agency, and at the

request of the Engineer, this forecast shall be filed with Engineer in hard-copy form. Further, no bituminous concrete shall be applied upon a residually wet surface, and no bituminous concrete which has been prematurely cooled by rain, either on the roadway or on the truck, will be accepted.

(n) The temperature of the mixture to be laid shall be between two hundred and twenty-five (225) degrees Fahrenheit and three hundred and twenty-five (325) degrees Fahrenheit and no mixture shall be placed when the air temperature in the shade and away from artificial heat is forty (40) degrees Fahrenheit or less. Variation from these temperatures may be permitted only on written permission of the Engineer.

(o) The edge of the asphalt mixture adjacent to rigid curb lines, around manholes, or other solid fixtures or where no shoulder is constructed, shall be hand tamped before being rolled.

(p) The bituminous concrete shall be laid in the prescribed number of courses as shown on the plans or as determined by the Engineer. A four (4) inch pavement shall be laid with a base course of two and one-half (2 1/2) inches in depth and a top course of one and one-half (1 1/2) inches in depth. All depths of courses described above shall mean the finished depths after rolling. All courses must be laid so that they will have the required thickness and be parallel to the proposed finished grade of the surface.

(q) After the paving mixture has been properly spread it shall be thoroughly and uniformly compressed by rolling with power rollers. On projects involving less than one hundred and fifty (150) tons of paving mixture per day one (1) tandem roller of not less than ten (10) tons shall be used. On projects using more than one hundred and fifty (150) tons but less than three hundred and fifty (350) tons two (2) rollers shall be required with one (1) additional roller for each two hundred (200) tons of mixture per day thereafter. A day shall be construed as eight (8) hours working time. If, in the opinion of the Engineer, satisfactory compaction is not obtained by rolling with a tandem roller, the Engineer may order the rolling to be done with ten (10) to twelve (12) ton three (3) wheeled roller with wheels not less than twenty-four (24) inches wide. All rollers used shall weigh at least two hundred and fifty (250) pounds per inch width of tread. Each roller shall be in charge of a competent, experienced roller operator and shall be kept in a nearly continuous operation as practical while the work is under way. The pavement shall be rolled longitudinally, diagonally, and transversely, as directed. Longitudinal rolling shall start at the side and proceed toward the center of the pavement, overlapping on successive trips by at least one-half (1/2) the width of the rear wheel of the roller. Diagonal rolling shall be in two (2) directions, the second diagonal rolling crossing the lines of the first. If the width of the work permits, it shall in addition be rolled at right angles to the center line. This method of rolling shall be continued and so executed that all roller marks, ridges, porous spots and impressions are eliminated, and the resulting surface has the required grade and contour. Rolling shall proceed at a rate not to exceed two hundred and fifty (250) square yards per hour, per roller. To prevent adhesion of the mixture to the roller the wheels shall be kept properly moistened but excess water or oil will not be permitted. Along forms, curb headers and similar structures and all places not accessible with a roller, the mixture shall be thoroughly compacted by tampers. Such tampers shall weigh not less than twenty-five (25) pounds and shall have a tamping face of not more than fifty (50) square inches. The surface of the mixture after compressing shall be smooth and true to the established crown and grade. Any mixture which becomes loose and broken, mixed with dirt or in any way defective shall be removed and replaced with fresh mixture, which shall be immediately compacted to conform with the surrounding area. Areas of one (1) square foot or more showing an excess of bitumen shall be removed and replaced.

(r) The densities of the completed pavement shall be not less than ninety-two (92) percent of the calculated density of a voidless mixture composed of the same materials in like proportions. After final compression, samples will be taken from the completed pavements and when tested by standard laboratory methods shall show compliance with aforesaid density requirement.

(s) Placing of the mixture shall be as nearly continuous as possible and the roller shall pass over the unprotected end of the freshly laid mixture only when the laying of the course is to be discontinued for such length of time as would permit the mixture to attain initial stability. In all such cases, including the formation of joints as hereinafter specified, provisions shall be made for proper bond with the new surface for the full specified depth of the courses. Transverse joints shall be formed by cutting back on the previous days run so as to expose the full depth of the course. When the laying of the course is resumed, the exposed edge of the joint shall be painted with a thin coat of hot asphalt cement and the fresh mixture shall be raked against the joint. Hot smoothers or tampers shall be carefully employed in such a manner as to heat the old pavement sufficiently, without burning it, to insure proper bond and then rolled. The work of setting up or making these joints shall be performed by competent workmen who are capable of making a correct, clean and neat joint.

(t) The lengths of lanes or strips of bituminous concrete in the base, binder and top courses shall be under control of the Engineer at all times. The Contractor shall lay such lengths as approved by the Engineer and then lay all adjacent strips to the full width of the roadway before being allowed to proceed ahead with other lanes. The practice of laying lanes of bituminous concrete for such lengths that an unduly long period of time elapses before laying adjacent lanes shall not be allowed.

(u) The finished surface shall present an even texture free from blemishes, ridge marks or imperfect spots and it shall be true as to line and grade. When tested with a sixteen (16) foot straight edge placed parallel with the center line of the surface course there shall be no deviation from a true surface in excess of one-quarter (1/4) of an inch. A ten (10) foot straight edge may be used on vertical curves. If any soft or imperfect places or spots develop in the surface, all such places shall be removed and replaced with new material and then rolled until the edges at which the new work connects with the old becomes invisible. All such removal and replacement of unsatisfactory surfacing shall be done by the Contractor without additional compensation.

Method Measurement

Under Item 16.1 Bituminous concrete Type I-1 measured for payment shall be measured by the ton in place and fully compacted.

Under Item 16.2 Bituminous concrete Sand Asphalt measured for payment shall be measured by the ton in place and fully compacted.

Basis of Payment

Under Item 16.1 the Contractor will be paid the contract unit price per ton for bituminous concrete Type I-1, complete in place, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item as shown on the plans, as directed by the Engineer and as specified herein.

Under Item 16.2 the Contractor will be paid the contract unit price per ton for bituminous concrete Sand Mix, complete in place, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item as shown on the plans, as directed by the Engineer and as specified herein.

ITEM 17- ADJUST EXISTING MANHOLES & CATCHBASINS

ITEM 18 – ADJUST EXISTING GATE BOXES

Description

Under Items 17 & 18, All pre-existing utility fixtures such as manholes, water gates (not to be confused with water service boxes), gas gates (not to be confused with house service boxes), catchbasins or any other existing utility structure within the limits of the project are to be raised to finished grade elevation after the final level courses have been completed. The work shall be done in such a manner that during the course of removal no debris falls into the invert of the structure, and upon restoration there will be no movement after they are once set to finished grade.

Under Items 17 & 18, as shown on the construction plans, the existing catch basin structure shall be converted to a drainage manhole by removing and disposing of the existing catch basin frame and grate and installing a new manhole frame and grate to grade. The work shall be done in such a manner that during the course of removal no debris falls into the invert of the structure, and upon restoration there will be no movement after they are once set to finished grade.

If at any time the adjusted utility fixtures settle or if upon completion of the work the fixtures are not even and flush with the adjacent area, or the set causes noise, then the Contractor shall cut out such portions of the existing work as may be necessary to reset the fixtures to the required grade or shall otherwise replace the set in its entirety. The resetting of the fixtures and the replacing of the cut out portions shall be done in a manner satisfactory to the Engineer. All the work done under this paragraph shall be done at the Contractor's own expense except where 'loose cover' noise is the cause of the problem and in that case the City shall only pay for the cost of the new casting set under the appropriate item in this contract.

Any Privately owned utility relocations and or utility issues are directly and coordinated by the Contractor with the respective utility company and shall be paid for under Item 1.

The Contractor is further advised that any excavation of existing concrete roadway which encompasses the City of Newton owned castings to be adjusted shall be paid for under Item 8.1 – Excavate and Dispose of Concrete Roadway. The contractor shall receive no additional compensation for the removal of concrete surrounding the utility castings to be adjusted under this item.

Materials

All brick used in the construction of manholes, or in the construction of the invert, or under the frame and cover, or in the repair and/or restoration of existing sewer manholes, shall be the best quality clay sewer brick, of the class known as "Hard Sewer Brick", burned hard entirely through; shall be straight-edged, of compact texture, and regular and uniform in size and shape. Bricks shall be free from stones and pebbles, and free from cracks, checks or fractures extending into the body of the brick in such a manner as to effect their serviceability or strength. Bricks shall have a compressive strength of not less than four thousand (4000) pounds per square inch when tested (on edge) in accordance with the A.S.T.M. Specifications, Serial Designation: C32-24. They may be rejected if they absorb water to the extent of more than twelve (12) per cent of their dry weight after being dried and then immersed in water, in accordance with A.S.T.M. Specifications, Serial Designation: C32-24. Bricks shall be not less than two and one-quarter (2 1/4) by three and three quarters (3 3/4) by eight (8) inches nor more than two and one-half (2 1/2) by four

(4) by eight and one-half (8 1/2) inches in size and shall be of rectangular cross-section. They shall have a smooth plane surface on two ends and at least one edge. When struck together, or when struck with a trowel, they shall give a clear ringing sound. Bricks may be rejected upon visual inspection by the Engineer if, in his opinion, they do not comply with these specifications as to size, shape and freedom from visible defects.

Mortar shall consist of cement and sand mixed in the proportion, by volume, of one (1) part cement and two (2) parts sand. Sand shall be clean, sharp, and shall have a gradation common to type known as "Brick Sand". Lime shall not be used.

Cement shall be air entrained and shall conform to the requirements of AASHTO Designation M134-48, Type IA to IIA.

Sand shall be composed of clean, hard, durable and impermeable particles resistant to wear and frost and free from injurious amounts of organic matter, loam, clay, salts, mica and weak grains.

Water shall be clean, clear and free from deleterious amounts of oil, acid, alkali, salts and organic matter.

Before any existing frame and grate set, or any frame and cover set, is reused, the Contractor is to verify that the existing set is acceptable to the Engineer. If in the opinion of the Engineer the casting set should be replaced then the Contractor is to dispose of that inadequate casting at his own expense and is to replace the casting set with a new unit. The new unit will be paid under Item 19.1 or 19.2 as required.

In areas where the existing surface is to be excavated, reclaimed leveled with bituminous concrete, and prior to the removal of the castings, the location of the existing castings shall be properly recorded by taking ties in a manner, and on a format, acceptable to the Engineer to whom he shall furnish a copy if so requested. The existing castings shall then be removed and carefully stored by the Contractor. The Contractor shall be held responsible for the protection of the castings and shall not place them alongside the roadway in such a way that the pedestrian and/or vehicular access is impaired. Any frames, grates or covers damaged or lost during construction shall be replaced by the Contractor at his own expense. The masonry shall be removed from the structures to a level below the proposed subgrade, especially in those cases where a reclamation process has been designated and the structures shall be covered with three-eighth (3/8) inch steel plates during construction as directed by the Engineer. The castings shall be replaced and set to finished grade only after the binder course and / or level course of pavement has been laid. After the castings are set to finished grade the area of excavated pavement around the casting shall be replaced with bituminous concrete, fully compacted to the full depth of the pavement and only with an approved pneumatic tamping bit. No plate compactors will be allowed during this patching operation, however, the Contractor must exercise extreme care not to disrupt the grade of the newly set casting.

During the course of construction the catchbasin structures shall be covered with perforated steel plates which shall be backfilled with an approved crushed stone to allow for continued drainage.

The work shall be done in such a manner that during the course of removal no debris falls into the invert of the structure, and upon restoration there will be no movement after they are once set flush and even with the adjacent finished area.

Basis of Payment

Under Items 17 & 18, the Contractor will be paid the contract unit price for each pre-existing manhole or catchbasin, and for each pre-existing gate box (not to be confused with water service boxes and/or gas

service boxes) adjusted to the proposed grade. The unit price shall include full compensation for all labor, materials, tools and equipment and all incidental work necessary to complete the work under these items in accordance with the plans, as directed by the Engineer and as specified herein.

Under Item 18 the contractor shall be paid the contract unit price for each catch basin changed in type to a manhole and adjusted to proposed grade. The unit price shall include full compensation for all labor, materials, tools and equipment and all incidental work including disposal of the existing frame and grate and connection of the proposed pipe to the existing structure, to complete the work under these items in accordance with the plans and as directed by the Engineer and as specified here in.

Dense graded crushed stone backfill required for the completion of work described under this item shall be paid for under Item 9 – Furnish and Place Dense Graded Crushed Stone.

Bituminous concrete patch material required for the completion of work described under this item shall be paid for under Item 10 – Furnish and Install Bituminous Concrete Base Course, Type I-1 (Shoulders, Intersections and Project Limits)

ITEM 19- FURNISH AND INSTALL NON WOVEN SELF ADHISIVE, ASPHALT IMPREGNATED GEOTEXTILE PAVING FABRIC

Description

Under Item 19 the contractor is to furnish and install, according to the specifications contained herein, the associated construction drawings, the manufacture instructions and the discretion of Engineer a non-woven, self adhesive, asphalt impregnated geotextile paving fabric. This fabric is to be laid over all transverse and longitudinal joints in the existing concrete roadway, but not at such time until all remedial measures under this contract have been completed to the satisfaction of the Engineer.

Materials

The non-woven geotextile paving fabric is to be Propex Petrotac PV-4591 in a 12” wide roll, or an approved equal. (For approved equal criteria see this section.) This example fabric is a two layer system, the top layer being an asphalt saturated paving fabric coated with a high quality rubberized asphalt sealant, beneath that layer is a second layer of rubberized asphalt adhesive.

The fabric is to be new and unused and is to be delivered to the site in the original factory
Packaging

Fabric is to conform to the following minimum standards and criteria:

Strip Tensile Strength shall be according to ASTM D-882 (modified) @ min. 50 pound/inch

Puncture Resistance shall be according to ASTM E-154 @ min. 200 pounds.

Permeance-Perms shall be according to ASTM D-146 (modified) min. ‘no cracks in fabric or rubberized asphalt.

Method of Construction

The fabric material is to be carefully handled to prevent sagging and any undue stresses from occurring in the fabric prior to its installation. Any fabric that has been damaged by stretching, tearing, puncturing, sunlight exposure or any other means prior to installation shall be rejected by the Engineer. The fabric is to be delivered to, and stored on site, in its original factory packaging, until the day it is to be installed.

When cutting of the fabric is required, the fabric is to be carefully cut by a sharp razor, but shall be installed in lengths that are as long as possible according to the manufacturer's recommendation. The fabric is to be laid in so that the longitudinal overlaps 'shingle' in the direction of the paving operation. Membrane to be laid in the perpendicular direction compared to the paving operation shall be laid first, and be underneath the layer which is laid in the direction of paving.

No vehicles are to drive on top of the paving fabric except for the paving equipment and trucks themselves. However, truck and equipment drivers should maintain slow speeds while driving on the fabric. The drivers shall use extra care not to make any sudden starts or stops, or sharp turns while driving on the fabric.

It is not required that the contractor acquire any specialty lay down equipment to install the proposed paving fabric, rather the fabric is a 'peel and stick' membrane that can be installed quickly by a two-person crew with no special equipment. The following materials are required to complete the fabric installation:

Brushes, paint rollers or spray equipment to apply primer, if it is required.

Utility knives to cut the material

A length of rope to guide the roll during laydown, if needed.

Pneumatic rolling equipment (pneumatic roller, pickup truck or other truck) to smooth the fabric and increase the bond. Stiff bristle push brooms can also be used to enhance adhesion of the Petrotac membrane to the pavement.

The placing of the fabric shall be according to the following and manufacturer's recommendations

The fabric must extend beyond the joint or crack it is covering by a minimum of six (6) inches.

Unroll 20' to 25' to establish directional alignment of the paving fabric strip. Do not remove the release sheet from the adhesive membrane.

Cut the release sheet with a utility blade while using care not to cut into the fabric membrane itself.

Pull the top portion of the cut release sheet unrolling the membrane and exposing the adhesive asphaltic membrane.

Re-roll the initial 20'-25' strip. Pull the release as shown by manufacturer's guidelines unrolling the membrane in the opposite direction and completing the operation. The release paper can be re-rolled and stored in the empty box for easy disposal.

The fabric is to be laid only in favorable conditions (sunny or partly sunny day with no threat of rain in a professional weather forecast). Prior to the installation of the paving fabric, the Contractor shall have the area swept clean with a street sweeper, or a combination of stiff bristle brooms and compressed air.

The paving fabric shall overlap adjacent fabric panels by a length of four (4) inches. The overlaps shall shingle in the direction of the paving operation.

The Contractor is advised that once the membrane is placed it can not be moved or straightened. It is therefore critical that proper alignment be established and maintained throughout the installation.

Method of Measurement

In no case shall any ‘bunching’ or ‘wrinkling’ of the fabric be allowed.

The fabric is not to be placed under any conditions which would qualify as ‘marginal’ conditions. These conditions include the presence of moisture, dust, cold temperatures (under 45 degrees Fahrenheit) and irregular surfaces. The intent of this order is restrict the application of the fabric to a time period when the conditions are ideal for installation. In the event that the primer is required, such required primer shall be paid for under the Engineer Miscellaneous fund.

Subsequent to placing the paving fabric and emulsified tack shall be placed prior to the installation of the final overlay. Note an emulsified tack coat is one which has been diluted with a water based product. The use of cut back asphalt is strictly forbidden. A cut back asphalt tack coat is one where the tack coat has been diluted by use of petroleum products. A cut back asphalt would react with the paving fabric as a solvent would and would cause slippage of the fabric and will not be allowed under this contract.

Under this item, measurement taken for payment shall be in terms of linear feet of fabric installed. Material overlapping required while starting a new strip / roll will not considered in the calculation of the linear foot length of fabric furnished and installed.

Basis of Payment

Under this item the Contractor will be paid the contract price per linear feet of fabric installed (overlapping of the fabric while starting a new strip / roll will not considered while calculating the linear foot length) for furnishing and installing the woven polypropylene geotextile fabric, complete in place, which unit price shall include full compensation for all labor, materials, tools, equipment, and all incidentals necessary to complete the work under this item in accordance with the plans, as directed by the Engineer and as specified herein.

ITEM 20 – FURNISH AND INSTALL ONE AND A HALF (1.5) INCH BITUMINOUS CONCRETE TYPE I-1 OVERLAY

Description

Under Item 20, The Contractor shall furnish and place bituminous concrete Type I-1 as shown on the plans, as directed by the Engineer and as specified herein.

This final bituminous concrete overlay shall extend to the project limits, and meet such limits neatly at all 1 ½” paper joints created under Item 10 - Furnish and Install Bituminous Concrete Base Course, Type I-1 (Shoulders, Intersections and Project Limits).

Materials

This type of pavement shall be composed of mineral aggregate, mineral filler and bituminous material, plant mixed and laid hot. The mixing and materials shall conform to the current specifications as set forth in the Commonwealth of Massachusetts Department of Transportation Standard Specifications for Highway and Bridges, Sections 460 and M3.

The final bituminous concrete overlay shall be laid on the restored concrete roadway or the level courses of asphalt, both of which have been further prepared with tack coat and paving fabric.

Method of Construction

The bituminous concrete shall be spread with a mechanical spreader of the self-powered type having a floating screed assembly controlling the elevation of the strike-off. The screed or strike-off member shall be adjustable to the shape of the cross-section of the finished pavement and shall be of such design as to produce without tearing, shoving or gouging, a finished surface of the evenness and texture desired. The use of road graders, or towed spreaders, shall not be allowed. If, in the opinion of the Engineer, the spreading and finishing equipment is not providing satisfactory results, he shall order the use of such equipment be discontinued and other satisfactory spreading and finishing equipment shall be provided by the Contractor. Hand spreading may be used in places inaccessible to the machine and when permitted by the Engineer. When hand spreading is permitted, the mixture shall be dumped, upon arrival, on approved steel dump sheets outside the area in which it is to be spread and shall then immediately laid to the required depth.

The Engineer may at any time order the use of side forms which shall be of a type subject to his approval. The forms shall be set so that the finished pavement shall be at a true line and grade as determined by the Engineer. The Engineer may in lieu of forms order the use of iron pins with grade marked thereon, so placed that they will not interfere with the travel of the machine spreader, but close enough so that a short straight edge placed on the newly laid pavement can reach a string line tied from pin to pin, and afford a visual check on the thickness of the newly laid pavement. The Engineer may order the pins to be used on the base, binder, or top courses. All expenses involved in the use of pins including the furnishing of such iron pins shall be borne by the Contractor.

The bituminous concrete must be kept clean during hauling and handling and covered during transit with canvas or other material which will retain the desired pavement temperature. These mixtures must not be hauled in such a manner that segregation of the ingredients takes place, or that a crust is formed on the surface, or that the mixture will crumble or flatten out when dumped. Trucks which transport the mixture shall be tight, and the side of the bodies shall be coated with a thin film of soap solution. The dispatching of trucks from the distribution point shall be so arranged that all the material which is to be delivered at or on the road surface during any day may be placed and shall have received final compression in a continuous manner in order to minimize cold seaming.

The bituminous concrete mixture shall be delivered to the work in such condition that it is easily workable and can be efficiently laid. The mixture shall be laid only on an approved base course which is dry and only when weather conditions are suitable which shall be decided by the Engineer.

All bituminous concrete applied to the roadway shall only be applied in bright sunlight or partly cloudy weather without the threat of rain. The Contractor is not to schedule bituminous roadway application unless such favorable weather conditions are professionally forecast by a recognized weather agency, and at the request of the Engineer, this forecast shall be filed with Engineer in hard-copy form. Further, no bituminous concrete shall be applied upon a residually wet surface, and no bituminous concrete which has been prematurely cooled by rain, either on the roadway or on the truck, will be accepted.

The temperature of the mixture to be laid shall be between two hundred and twenty-five (225) degrees Fahrenheit and three hundred and twenty-five (325) degrees Fahrenheit and no mixture shall be placed when

the air temperature in the shade and away from artificial heat is forty (40) degrees Fahrenheit or less. Variation from these temperatures may be permitted only on written permission of the Engineer.

The edge of the asphalt mixture adjacent to rigid curb lines, around manholes, or other solid fixtures or where no shoulder is constructed, shall be hand tamped before being rolled.

The bituminous concrete shall be laid in the prescribed number of courses as shown on the plans or as determined by the Engineer. A four (4) inch pavement shall be laid with a base course of two and one-half (2 1/2) inches in depth and a top course of one and one-half (1 1/2) inches in depth. All depths of courses described above shall mean the finished depths after rolling. All courses must be laid so that they will have the required thickness and be parallel to the proposed finished grade of the surface.

After the paving mixture has been properly spread it shall be thoroughly and uniformly compressed by rolling with power rollers. On projects involving less than one hundred and fifty (150) tons of paving mixture per day one (1) tandem roller of not less than ten (10) tons shall be used. On projects using more than one hundred and fifty (150) tons but less than three hundred and fifty (350) tons two (2) rollers shall be required with one (1) additional roller for each two hundred (200) tons of mixture per day thereafter. A day shall be construed as eight (8) hours working time. If, in the opinion of the Engineer, satisfactory compaction is not obtained by rolling with a tandem roller, the Engineer may order the rolling to be done with ten (10) to twelve (12) ton three (3) wheeled roller with wheels not less than twenty-four (24) inches wide. All rollers used shall weigh at least two hundred and fifty (250) pounds per inch width of tread. Each roller shall be in charge of a competent, experienced roller operator and shall be kept in a nearly continuous operation as practical while the work is under way. The pavement shall be rolled longitudinally, diagonally, and transversely, as directed. Longitudinal rolling shall start at the side and proceed toward the center of the pavement, overlapping on successive trips by at least one-half (1/2) the width of the rear wheel of the roller. Diagonal rolling shall be in two (2) directions, the second diagonal rolling crossing the lines of the first. If the width of the work permits, it shall in addition be rolled at right angles to the center line. This method of rolling shall be continued and so executed that all roller marks, ridges, porous spots and impressions are eliminated, and the resulting surface has the required grade and contour. Rolling shall proceed at a rate not to exceed two hundred and fifty (250) square yards per hour, per roller. To prevent adhesion of the mixture to the roller the wheels shall be kept properly moistened but excess water or oil will not be permitted. Along forms, curb headers and similar structures and all places not accessible with a roller, the mixture shall be thoroughly compacted by tampers. Such tampers shall weigh not less than twenty-five (25) pounds and shall have a tamping face of not more than fifty (50) square inches. The surface of the mixture after compressing shall be smooth and true to the established crown and grade. Any mixture which becomes loose and broken, mixed with dirt or in any way defective shall be removed and replaced with fresh mixture, which shall be immediately compacted to conform with the surrounding area. Areas of one (1) square foot or more showing an excess of bitumen shall be removed and replaced.

The densities of the completed pavement shall be not less than ninety-two (92) percent of the calculated density of a voidless mixture composed of the same materials in like proportions. After final compression, samples will be taken from the completed pavements and when tested by standard laboratory methods shall show compliance with aforesaid density requirement.

Placing of the mixture shall be as nearly continuous as possible and the roller shall pass over the unprotected end of the freshly laid mixture only when the laying of the course is to be discontinued for such length of time as would permit the mixture to attain initial stability. In all such cases, including the formation of joints as hereinafter specified, provisions shall be made for proper bond with the new surface for the full specified depth of the courses. Transverse joints shall be formed by cutting back on the previous

days run so as to expose the full depth of the course. When the laying of the course is resumed, the exposed edge of the joint shall be painted with a thin coat of hot asphalt cement and the fresh mixture shall be raked against the joint. Hot smoothers or tampers shall be carefully employed in such a manner as to heat the old pavement sufficiently, without burning it, to insure proper bond and then rolled. The work of setting up or making these joints shall be performed by competent workmen who are capable of making a correct, clean and neat joint.

The lengths of lanes or strips of bituminous concrete in the base, binder and top courses shall be under control of the Engineer at all times. The Contractor shall lay such lengths as approved by the Engineer and then lay all adjacent strips to the full width of the roadway before being allowed to proceed ahead with other lanes. The practice of laying lanes of bituminous concrete for such lengths that an unduly long period of time elapses before laying adjacent lanes shall not be allowed.

The finished surface shall present an even texture free from blemishes, ridge marks or imperfect spots and it shall be true as to line and grade. When tested with a sixteen (16) foot straight edge placed parallel with the center line of the surface course there shall be no deviation from a true surface in excess of one-quarter (1/4) of an inch. A ten (10) foot straight edge may be used on vertical curves. If any soft or imperfect places or spots develop in the surface, all such places shall be removed and replaced with new material and then rolled until the edges at which the new work connects with the old becomes invisible. All such removal and replacement of unsatisfactory surfacing shall be done by the Contractor without additional compensation.

Method Measurement

Bituminous concrete Type I-1 measured for payment shall be measured by the ton complete in place and fully compacted.

Basis of Payment

Under Item 20 the Contractor will be paid the contract unit price per ton for bituminous concrete Type I-1, complete in place, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item as shown on the plans, as directed by the Engineer and as specified herein.

ITEM 21 – RETRIEVE & DEPLOY A CITY OWNED (GATE-BOX OR MANHOLE) PROTECTOR RING

Description

Under **Item 21** the Contractor shall retrieve and deploy City of Newton owned manhole protector rings and/or City of Newton owned gate-box protector rings. **These transition rings shall only be deployed at those locations, and only in such quantities, as the Engineer directs, and such work shall be performed immediately and on a continuous basis in harmonic unison with the progression of the project.** The primary purpose of these rings is to prevent tire damage and/or vehicular ‘slaloming’ by providing a ramping means for the purpose of transitioning vehicles over the manholes and water gate boxes which are primarily located in the wheel-path and/or at manhole concentration points such as intersections.

Materials

The Contractor shall work closely with the Engineer to determine which size protector ring, as well as the number of rings, that will best meet the needs of the project site(s), before the balance of the order is filled.

The Contractor is advised that each Manhole Protector Ring (a.k.a manhole safety ramps) typically weigh approximately thirty (30) pounds each and are heavy-duty units that are equal to Part No. MSR10, MSR26 or MSR31, whichever is applicable, as supplied by American Highway Products Ltd., (<http://www.ahpl.com/safetyramp1.php>)

Method of Administration

The Contractor shall work closely with the Engineer to develop a mutually acceptable plan whereby the number of rings that are retrieved and deployed by the Contractor are most easily and most conveniently documented. However, the Engineers decision as to the final means and methods concerning the manner in which this program is administered shall take precedence.

When requested by the Engineer to do so the Contractor shall retrieve the designated number of manhole and/or gate-box protector rings from the centralized storage area located at the Elliot St. DPW Yard. **Any rings not pre-approved by the Engineer to be retrieved and deployed shall not be paid under this program but shall be returned to the centralized storage area, and neatly stacked, at no expense to the City.**

At no time shall the Contractors vehicle(s), used in the performance of these activities, leave the City of Newton while carrying the City owned manhole rings. **Any rings which are lost, due to the negligence of the Contractor to abide by this mandate or otherwise, shall be replaced by the Contractor at no additional expense to the City.**

The Contractor shall be responsible for loading and unloading the rings onto and off-of his service vehicle at the time of retrieval, and at the time of the field deployment, where the Contractor shall place each ring directly upon the manhole castings that lie within the designated project zone. However, any rings which have been deployed, but which are subsequently deemed not to best meet the needs and/or the intent of the field operations, shall be removed from the casting and reset somewhere else at no additional expense to the City..

Method of Measurement

The Contractor shall be paid for **each** City owned manhole protector ring, or each City owned gate-box protector ring, retrieved and deployed in accordance with the directives of this Item. Only those protector rings pre-approved by the Engineer to be retrieved and subsequently deployed in the course of performing these activities shall be paid for under this item.

Basis of Payment

Under **this item** the Contractor will be paid the contract unit price for **each** City owned manhole protector ring, or each City owned gate-box protector ring, retrieved and deployed, and which has been pre-approved, authorized and ultimately verified by the Engineer. This unit price shall include full compensation for all labor

materials, tools and equipment, and all incidentals necessary to complete the work under this Item, as directed by the Engineer, and as specified herein.

Item: 22 – REMOVE & STOCKPILE (CITY OWNED) MANHOLE PROTECTOR RINGS

Description

Under **Item 22** the Contractor shall collect, pick up, transport and stockpile the City of Newton owned gate-box and/or manhole protector rings which were previously deployed under a separate contract and were removed from the roadway by the Contractor immediately prior to the tack coat application. During the course of these activities each ring shall become the responsibility of the Contractor until such time as they have been returned, carefully stacked/stockpiled at the **Elliot St. DPW yard**, and ultimately accounted for.

Materials

The Contractor is advised that each Manhole Protector Ring (a.k.a. manhole safety ramps) typically weighs thirty (30) pounds each and are heavy-duty units that are equal to Part No. MSR10, MSR26 or MSR31, whichever is applicable, as supplied by American Highway Products Ltd (<http://www.ahp1.com/safetyramp1.php>)

Method of Administration

The Contractor shall work closely with the Engineer to develop a mutually acceptable plan whereby the number of rings that are removed, and ultimately stockpiled by the Contractor, are most easily and most conveniently documented. However, the Engineers decision as to the final means and methods concerning the manner in which this program is administered shall take precedence.

The Contractor shall remove each ring from the roadway upon approach of the pavement laden spreader and he shall immediately place the ring in a location which is not to interfere with pedestrian and/or vehicular traffic. Subsequently, and no later than the end of the day's work, the Contractor shall collect all (removed) rings and he shall deliver them to the centralized location at the Elliot St. DPW yard where he shall cause them to be neatly stacked.

At no time shall the Contractor's vehicle(s), used in these activities, leave the City of Newton while carrying any City owned manhole rings. **Any rings which are lost and/or damaged, due to the negligence of the Contractor to abide by this mandate, shall be replaced by the Contractor at no additional expense to the City.**

The Contractor shall be further responsible for loading and unloading the rings onto and off of his service vehicle at the time of retrieval and stockpiling.

Method of Measurement

The Contractor shall be paid for **each** gate-box or manhole protector ring removed from the site and carefully stockpiled at the Elliot St. DPW yard and ultimately verified by the Engineer.

Basis of Payment

Under **Item 22** the Contractor will be paid the contract unit price for **each** City of Newton owned gate-box and/or manhole protector ring collected, picked-up, transported, appropriately stockpiled and ultimately accounted for. This unit price shall include full compensation for all labor materials, tools and equipment, and all incidentals necessary to complete the work under this Item, as directed by the Engineer, and as specified herein.

ITEM 23- MISCELLANEOUS WORK ALLOWANCE (ENGINEER DISCRETION)

Description

(a) The work of this section is to complete certain items of work which are not called for under the specifications or indicated on the plans but which are requested by the Engineer. These items of work shall be completed only when and as directed by the Engineer. The Contractor may not proceed with any work under this section without the written notice of the Engineer to complete the work under the "Miscellaneous Work Allowance".

(b) The sum to be allowed for the work of this item shall be **forty thousand dollars (\$40,000.00)**.

(c) All work under this item shall be paid for by one or more or a combination of the following methods at the City's discretion.

- a. Unit prices previously bid.
- b. An agreed lump sum.
- c. The actual cost of:
 1. Labor, including foremen;
 2. materials entering permanently into the work;
 3. the ownership or rental cost of construction plant and equipment during the time of use on the extra work;
 4. power and consumable supplies for the operation of power equipment;
 5. insurance;
 6. social security and old age and unemployment benefits.

(d) To the cost under c. there shall be added a fixed fee to be agreed upon but not to exceed fifteen per cent (15%) of the actual cost of the work. The fee shall be compensation to cover the cost of supervision, overhead, bond, profit and any other general expense.

(e) The City shall retain a cash credit in full or in part, in the event that the final cost of materials and/or equipment is lower than the original cash allowance provided.

(f) To the estimated cost or actual cost under (c) for work performed by subcontractors, there shall be added a fixed fee of ten per cent (10%) as compensation to cover the subcontractor's cost of supervision, overhead, profit and any other subcontract general expense, plus ten per cent (10%) as compensation to cover the General Contractor's cost of supervision, overhead, profit, bond and any other general expenses.

Basis of Payment

(g) Payment for work completed under Item 23 shall be as specified above, in full or in part, as approved by the Engineer.

ITEM 24 – POLICE OFFICERS

Description

(a) The Contractor shall include in his bid an allowance of eighty thousand dollars (\$80,000.00) for payment of Police traffic officers. This allowance will be used as a basis for comparison of bids only.

(a) The City will reimburse the Contractor for the full amount of charges for Police services.

(b) Article 1 of the Special Conditions of the Contract shall apply.

(c) Under this item the Contractor shall be responsible for ordering, and for canceling details on a day to day basis. In the event the Contractor has ordered police details, and does not give the police department ample advance notice that work has been cancelled for that day due to inclement weather or for any other reason, then the Contractor shall bear the expense of that billed detail.

(e) The Contractor shall completely familiarize himself with the current policies regarding and/or regulating police details. In the event police detail requests cannot be completely filled to cover the Contractor's scheduled work for any particular day then the Contractor shall adjust his work schedule accordingly and shall not hold the City responsible for any loss of time, or for any other financial loss. The City of Newton will however grant an extension of time to the original contract term for each day lost due to insufficient police staffing.

Basis of Payment

(d) Under Item 24 the Contractor shall submit paid invoices to the Engineer. The Contractor shall then be reimbursed the full invoice amount for City of Newton Police Department charges and/or, when applicable, for Massachusetts State Police charges, as full reimbursement under the allowance for payment of Police officers.

(g)The original invoice issued by the billing authority must be submitted to the Engineer for payment under this item.

END OF SECTION